

2013

Community Health Status Assessment Davis County, Utah



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COUNTY

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Executive Summary

As the local public health agency for Davis County, the Davis County Health Department (DCHD) coordinated with community partners to develop and conduct a comprehensive community health assessment. Understanding the health needs and resources of the community provides a foundation for efforts to improve the health of the population. This health assessment will be the basis for setting priorities and guiding use of resources. A community health assessment is one tool DCHD uses to improve public health services for the population.

The County Health Rankings (CHR) model is used as a framework for assessing the health status of the population because of the way the data is organized, reported, and ranked. The CHR are compiled using county-level measures from a variety of national and state data sources. Counties in every state are ranked according to 30 measures (2013). Davis County can be compared to other counties in Utah for each measure in the CHR.

The CHR model includes measures for health outcomes (mortality and morbidity) and health factors (health behaviors, clinical care, social/economic factors, and physical environment). The 2013 CHR show Davis County as the 6th healthiest county in Utah out of 27 ranked counties. Most of the counties that rank higher than Davis are small, rural counties. The CHR shows Davis County's strengths are in indicators measuring clinical care and social/economic factors.

In addition to the CHR, many other health data sources were used to assess health outcomes and factors. Over 50 health status reports and needs assessments were gathered from partner organizations at the national, state, and local levels and are referenced in this report. Systematic collection and analysis of data provides the health department and county residents with a sound basis for decision-making and action.

The DCHD also collected qualitative data to give context to health indicators and provide understanding about the health culture in Davis County. Focus groups and key informant surveys have been conducted to gather informed opinions about the health needs and resources in the county. These assessments help identify areas for health improvement, determine factors that contribute to health issues, and identify assets and resources that can be mobilized to improve population health.

Engaging with the community to gather information contributes a community voice to assessment efforts. These efforts provide valuable information about community strengths, unique issues in the county, and perceptions and priorities of the population. Assessments are tagged with "Your Community. Your Health. Your Voice." This helps convey the purpose of assessment efforts.

Because health status reports and statistics are continually being released and updated, assessment efforts are ongoing. This report represents a snapshot in time and presents the most current data available in one document. The indicators included are comprehensive and broad in scope. Priority health concerns identified by Davis County residents in the 2012 Key Informant Survey are examined more in-depth than others.

This report provides rates and measures for Davis County, some small areas and cities, and, on occasion, census tracts. The indicators are compared to Utah and the United States where possible. The measures can be viewed as baselines that will be used to assess progress in 3–5 years.

Executive Summary

Social Determinants of Health

Social and economic factors, also known as the social determinants of health, may have more influence on health than other types of health factors. When looking at population health, communities with more income and education are healthier, as is the case in Davis County. When compared to Utah and the United States, Davis County is more educated, has less unemployment, less poverty, more home owners, more social support, and less violent crime.

National Benchmarks

The CHR provide a national benchmark (90th percentile) for each measure reported. Davis County is meeting or exceeding the national benchmark for premature death, poor/fair health, adult smoking, adult obesity, physical inactivity, motor vehicle crash rate, preventable hospital stays (Medicare enrollees), some college, children in poverty, inadequate social support, and children in single-parent households. This means Davis County is in the top 10% (best) of all counties in the United States for these indicators. Davis County meets the national benchmark for more than 30% of the measures in the CHR.

Healthy People 2020 Targets

Healthy People 2020 (HP2020) targets are 10-year national objectives for improving the health of Americans. It is difficult to compare every indicator in this report to a HP2020 target because many targets are specific to subpopulations or settings. In cases where the indicators in this assessment match up with a HP2020 target the comparisons are included. Davis County is meeting and exceeding many HP2020 targets, but in the following areas, targets are not being met: prostate cancer deaths, poisoning deaths, suicide, *E.coli* O157:H7 rates, seatbelt use, sun safety practice, mammograms, colorectal cancer screening, diabetes A1C tests, pneumococcal vaccine (adults), adequate immunizations by kindergarten, and high school graduation (9th grade cohort).

Other Indicators to be Examined

Other indicators not linked to CHR or HP2020 targets should also be examined because Davis County compares poorly with the national average, state average, or other local health departments. These areas include prostate cancer incidence, asthma prevalence, Chlamydia incidence, depression, youth alcohol use, high blood pressure management, rate of primary care and mental health providers, air quality, and food environment.

Leading Health Concerns of Davis County Residents

Two leading Davis County health concerns identified in the 2012 Key Informant Survey are air quality and obesity. Davis County is in an EPA nonattainment area for high levels of air pollution due to PM2.5. The county is in a maintenance area for ozone. Salt Lake County is a nonattainment area for PM10, which is of concern for residents in the southern part of Davis County. When it comes to obesity and overweight indicators, Davis County compares well to the state and nation; however, 25% of adults are obese and 63% are at an unhealthy weight.

DCHD is not satisfied with being ranked the 6th healthiest county in Utah. By examining health indicators found in CHR and assessing other health data and factors, groundwork is being laid for health improvement efforts. The information in this report can be used to educate and mobilize Davis County residents, develop priorities, advocate for resources, and plan actions to improve the health of the county. Public health partners, local leaders, and citizens can work together to create a healthier place to live, learn, work, and play.

Introduction

Community Health Assessment Background

A community health assessment is one of the core functions of public health and is a prerequisite for accreditation. The Public Health Accreditation Board (PHAB) is the official accrediting body for public health departments and seeks to advance quality and performance within public health departments. PHAB's definition of a community health assessment is:

A systematic examination of the health status indicators for a given population that is used to identify key problems and assets in a community. The ultimate goal of a community health assessment is to develop strategies to address the community's health needs and identified issues. A variety of tools and processes may be used to conduct a community health assessment; the essential ingredients are community engagement and collaborative participation.¹

DCHD recognizes that as the local public health agency it is the department's role to bring together community partners to develop and conduct a comprehensive community health assessment for the population of Davis County. Understanding the health needs and resources of the community will provide a foundation for efforts to improve the health of the population. A community health assessment is one tool DCHD will use in an effort to improve public health services, value, and accountability to stakeholders.

Purpose

The purpose of this community health assessment is to learn about the health status of Davis County. Community health assessments describe the health status of the population, identify areas for health improvement, determine factors that contribute to health issues, and identify assets and resources that can be mobilized to address population health improvement. Community health assessments are developed at the local level to address the health of the population in the jurisdiction served by the health department.

This assessment can be a resource for all members of the public health system, policy leaders, and the general public. It will be the primary resource to direct health improvement efforts in Davis County. The information will help guide planning, priority selection, and coordination of community resources and assets.

Process

A collaborative process was used to collect and analyze data and information. Systematic collection and analysis of data and information provides the health department and county residents with a sound basis for decision-making and action. Many community partners were contacted for information about assessments they have conducted that pertain to Davis County. Data and information was gathered on demographics, socioeconomic characteristics, quality of life, behavioral factors, the environment (including the built environment), morbidity and mortality, and other social and community determinants of health status. This local community health assessment will provide the basis for development of a local community health improvement plan.

Methods

Health Status Assessment

The majority of this document is a health status assessment for Davis County that compiles and analyzes data about health status, quality of life, and risk factors in the community. The CHR model² is used as a starting point because of the way the data is organized, reported, and ranked. The rankings are compiled using county-level measures from a variety of national and state data sources. The CHR model is grounded in the belief that programs and policies implemented at the local, state, and federal levels have an impact on a variety of factors that, in turn, determine the health outcomes for communities across the nation. The rankings are based on a model of population health that emphasizes the many factors that, if improved, can help make communities healthier places to live, learn, work, and play.

A number of different health factors shape a community's health outcomes. The CHR model includes 2 types of health outcome measures to represent how long people live (mortality) and how healthy people feel (morbidity). Four types of health factors represent tomorrow's health: health behaviors, clinical care, social/economic, and the physical environment.

This year (2013) is the 4th year of the CHR. Counties in each of the 50 states are ranked according to summaries of a variety of health measures. Those having high ranks e.g.; 1 or 2, are considered to be the healthiest. Counties are ranked relative to the health of other counties in the same state on the following measures:

1. Health Outcomes—rankings are based on an equal weighting of 1 length of life (mortality) measure and 4 quality of life (morbidity) measures.
2. Health Factors—rankings are based on weighted scores of 4 types of factors:
 - Health behaviors (7 measures)
 - Clinical care (6 measures)
 - Social/economic (7 measures)
 - Physical environment (5 measures)

The CHR model uses the best data available nationally from a variety of sources. The measures are very specific in some cases and may not represent a complete picture of community health.

Indicators

The CHR show that how long and how well people live depends on multiple factors beyond just their access to medical care. It examines 30 indicators that influence health, including rates of childhood poverty, rates of smoking, obesity levels, teen birth rates, access to physicians and dentists, rates of high school graduation and college attendance, access to healthy foods, levels of physical inactivity, and percentages of children living in single-parent households. At the state and local levels additional measures have been identified and will be included in this health status assessment that demonstrate health concerns in Davis County.

Not every available indicator is included in this report in an effort to make it manageable and meaningful. Special emphasis is placed on indicators where Davis County is not meeting Healthy People 2020³ targets (**Appendix 1**) and those identified by Davis County residents in the 2012 Key Informant Survey as main health concerns.

Methods

Sources Used

Primary sources for demographic information:

- U.S. Census Bureau
- Davis County Office of Community & Economic Development
- Utah Department of Workforce Services

Primary sources for health indicators:

- CHR data found in **Appendix 2**
- Davis County Community Snapshot, Utah Department of Health found in **Appendix 3**
- Community Health Needs Assessment Data Report (CHNA) found in **Appendix 4**
- Healthy People 2020 (HP2020) Leading Health Indicators found in **Appendix 5**
- Division of Substance Abuse and Mental Health Annual Report, 2012, found in **Appendix 6**
- Utah's Indicator-Based Information System for Public Health (IBIS)
- Prevention Needs Assessment Survey, 2011 (PNAS)

At times the Davis County Snapshot from the County Health Rankings, the Davis County Community Snapshot from Utah Statewide Health Status Report, and the Davis County Community Health Needs Assessment Report from CHNA.org include the same indicators but report measures differently. In these cases the measure that was most current or covered the most years of data was selected for this report.

Small Area Data

In order to facilitate reporting data at the community level, Utah has been divided into small areas. Areas are determined based on specific criteria, including population size, political boundaries of cities and towns, and economic similarity. The health measures reported by a small area are those with events occurring with sufficient frequency to be meaningful. Some indicators in IBIS can be queried for 61 small areas in Utah. Davis County is divided into 6 small areas: Clearfield/Hill AFB, Layton, Syracuse/Kaysville, Farmington/Centerville, Woods Cross/North Salt Lake, and Bountiful. For small area boundaries and definitions in Davis County, see **Appendix 7**.

Qualitative Data

Qualitative data has also been collected that gives context to health indicators and provides understanding about the health culture in Davis County. Focus groups and key informant surveys have been conducted to gather informed opinions about the health needs and resources in the county. These assessments help identify areas for health improvement, determine factors that contribute to health issues, and identify assets and resources that can be mobilized to improve population health.

Engaging with the community to gather information contributes a community voice to assessment efforts. These efforts provide valuable information about community strengths, unique issues in the county, and perceptions and priorities of the population. Some qualitative data and quotes from Davis County residents are included throughout this health status assessment where applicable.

Needs Assessments & Health Status Reports

Non-Profit Healthcare Agency Needs Assessments

Agencies conducting community health assessments are encouraged to work with non-profit hospitals in their community who are federally required to conduct community health needs assessments. In Davis County there is only one non-profit hospital, South Davis Community Hospital, that provides specialty services for rehabilitation, transitional care, and long-term care. They have not begun the process of a community needs assessment.

Davis Hospital and Medical Center, Iasis Healthcare; and Lakeview Hospital, MountainStar Healthcare are privately owned and operated. Both hospitals were contacted for any community needs assessment data they could contribute to the health status assessment. Neither hospital had information to share at this time.

Intermountain Healthcare, the largest healthcare provider in Utah, does not operate a hospital in Davis County but has clinics there. Davis County residents often access their facilities and hospitals in neighboring counties. DCHD administration participated in their community health needs assessment process.

Midtown Community Health Center is a federally qualified health center. The Midtown Davis County Medical and Dental Clinics are co-located in the same building as the DCHD. They are federally required to conduct a needs assessment.

The following are needs assessments that were available from healthcare agencies in the community:

- Intermountain Healthcare Community Needs Assessment, 2012
- Midtown Community Health Center Needs Assessment, 2011

These healthcare needs assessments are based on Behavioral Risk Factor Surveillance System (BRFSS) data reports for selected areas/zip codes. They do not necessarily represent a comprehensive health assessment.

Needs Assessments & Health Status Reports

Other Community Needs Assessments & Health Status Reports

Many other partner agencies were consulted to find already existing community needs assessments and other applicable health status reports relevant to Davis County. There were many available from a wide range of agencies, some for specific health topics and some for social determinants of health. They are listed below. If the report is publically available online, the web link is included.

- America's Health Rankings, United Health Foundation, 2012
<http://www.americashealthrankings.org/UT/2012>
- Bicycle Helmet Use in Utah, 2008
http://www.health.utah.gov/vipp/pdf/FactSheets/factSheet_BicycleHelmet_8-20-09_FINAL.pdf
- Bountiful Communities That Care Proposed Program Information and Recommendation Report, 2011
- Central Line-Associated Bloodstream Infections in Utah, 2011 Annual & 2012 Interim Report
<http://health.utah.gov/epi/HAI/documents/2011-12CLABSI.pdf>
- Childhood Overweight in Utah, 2012
[http://choosehealth.utah.gov/documents/HW%20Elem%20Project%20\(1\)%202012%20final.pdf](http://choosehealth.utah.gov/documents/HW%20Elem%20Project%20(1)%202012%20final.pdf)
- Communicable Diseases, Davis County, 2012
http://www.co.davis.ut.us/health/featured_items/2012_communicable_disease.pdf
- Community Action Partnership of Utah Annual Report on Poverty in Utah, 2011
<http://www.caputah.org/poverty/reports.php>
- Community Health Needs Assessment (CHNA) Data Report, 2013
<http://www.chna.org/Home.aspx>
- Community Health Status Indicators, 2009
<http://wwwn.cdc.gov/CommunityHealth/SummaryMeasuresOfHealth.aspx?GeogCD=49011&PeerStrat=12&state=Utah&county=Davis>
- Community Transformation Grant, Community Health Assessment Report, Utah Department of Health, 2013
- County Health Rankings & Roadmaps, Davis County, Utah, 2013
<http://www.countyhealthrankings.org/app#/utah/2013/davis/county/outcomes/overall/snapshot/by-rank>
- Crime in the United States, Utah Offenses Known to Law Enforcement by City, 2011
http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2011/crime-in-the-u.s.-2011/tables/table8statecuts/table_8_offenses_known_to_law_enforcement_utah_by_city_2011.xls
- Davis County Immunization Coverage Report, 2012
<http://www.immunize-utah.org/pdf/2012ImmCovRpt/DavisImmCovRpt.pdf>
- Division of Substance Abuse and Mental Health 2012 Annual Report
<http://www.hsdsa.utah.gov/docs/Annual%20report%202012.pdf>
- Family Connection Center Community Assessment, 2011
- Head Start Community Assessment, 2011
- The Impact of Heart Disease & Stroke in Utah, 2012
<http://www.hearthighway.org/pdfs/Burden%20Report2012.pdf>
- Layton Communities That Care Risk & Protective Assessment, 2011
- Layton Communities That Care Resources Assessment Report, 2011

Needs Assessments & Health Status Reports

- 2012 Local Health Department Maternal & Child Health Performance Measure Report
http://health.utah.gov/mch/pdf/2012_LHD_PM_Report.pdf
- National Survey of Children's Health State Data Snapshot, 2011/2012
<http://www.childhealthdata.org/browse/snapshots/nsch-profiles?rpt=16&geo=46>
- March of Dimes 2012 Premature Birth Report Card
<http://www.marchofdimes.com/mapflashfilespad/reportcards/2012/english/UT.pdf>
- The Oral Health Status of Utah's Children, Results from the 2010 Oral Health Survey
http://health.utah.gov/oralhealth/pdf/oralHealthReport_2011.pdf
- 10th Annual Ready or Not? Protecting the Public from Diseases, Disasters & Bioterrorism, Trust for America's Health
<http://www.healthyamericans.org/reports/bioterror12/release.php?stateid=UT>
- Salt Lake Valley Health Department, Community Health Assessment, 2013
<http://www.slcohealth.org/pdf/CHA031113.pdf>
- A Snapshot of Clinical Performance by Utah Small Area (July 1, 2012)
http://utahatlas.health.utah.gov/HB128SA_2010.pdf
- State Indicator Report on Fruits and Vegetables, 2013
<http://www.cdc.gov/nutrition/downloads/State-Indicator-Report-Fruits-Vegetables-2013.pdf>
- State of the Air, American Lung Association, 2013
<http://www.stateoftheair.org/2013/states/utah/davis-49011.html>
- State of the County, 2013
http://www.daviscountyutah.gov/documents/public_notice/state_of_davis_county.pdf http://www.daviscountyutah.gov/documents/public_notice/state_of_davis_county_details.pdf
- State of Tobacco Control 2013, American Lung Association
<http://www.stateoftobaccocontrol.org/state-grades/utah>
- State Suicide Rates Report, Utah Department of Health (2006–2010)
- Student Health and Risk Prevention Statewide Survey (SHARP), 2011 Prevention Needs Assessment Results, Davis County
<http://www.dsamh.utah.gov/docs/Davis%20County%20LSAA%20Profile%20Report.pdf>
- Teen Seatbelt Observation Surveys, Davis County Health Department, FY 11–12
- Tobacco Prevention and Control in Utah, Twelfth Annual Report, August 2012
<http://www.tobaccofreeutah.org/pdfs/tpcfy12report.pdf>
- Utah Cancer Small Area Report 2011, Utah Department of Health
http://health.utah.gov/ucan/Data/Utah%20Data/Utah_Data_Sources.php
- Utah Department of Public Safety, Highway Safety, EASY Program, FY 2011
- Utah Depression Surveillance Report, 2005–2007
<http://health.utah.gov/opha/publications/brfss/Depression/Depression.pdf>
- Utah Division of Air Quality 2012 Annual Report
<http://www.airquality.utah.gov/Public-Interest/annual-report/.pdf/2012Annual%20Report.pdf>
- Utah Division of Air Quality PM2.5 State Implementation Plan Information Booklet
<http://www.airquality.utah.gov/Public-Interest/Current-Issues/pm2.5/docs/DAQPM25BookletLow.pdf>
- Utah Health Status Update, Changes in Rates of Children with Autism Spectrum Disorders, 2002–2010, January 2013
http://health.utah.gov/opha/publications/hsu/1301_Autism.pdf

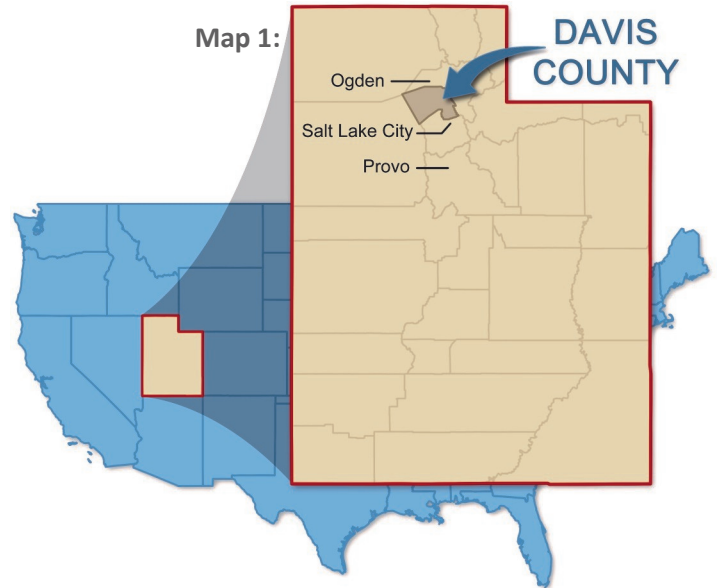
Needs Assessments & Health Status Reports

- Utah Health Status Update, Effect of Improved Survey Methodology on BRFSS Estimates, June 2012
http://health.utah.gov/opha/publications/hsu/1206_BRFSSCell.pdf
- Utah Health Status Update, Health Disparities and the Social Determinants of Health, March 2013
http://health.utah.gov/opha/publications/hsu/1303_HealthDisp.pdf
- Utah Hospital Comparison Report, 2011
<https://health.utah.gov/myhealthcare/monahrq/Quality.html?op=0>
- Utah Poison Control Center 2011 Annual Report & Davis County Reports
- Utah's Indicator-Based Information System for Public Health, Community Snapshot for Davis County Local Health District
<http://ibis.health.utah.gov/view?xslt=html/community/snapshot/report/ReportPage.xslt&xml=community/GeoLHD.xml&community=3&indicatorSetName=AllIndicators>
- Underage Drinking in Utah, 2013
- United Way of Salt Lake Community Assessment, 2010
http://www.uw.org/our-work/research-reports/commasses2010_low-res-1.pdf
- Utah Alzheimer's Statistics
http://www.alz.org/documents_custom/facts_2013/alz_f-statesheets-45.pdf?type=interior_map&facts=undefined&facts=facts
- 2011 Utah Crash Summary
<http://publicsafety.utah.gov/highwaysafety/documents/2011UtahCrashSummary.pdf>
- 2012 Utah Statewide Health Status Report
<http://health.utah.gov/opha/publications/2012StatewideHS.pdf>
- Utah Violence and Injury State Plan Data by Small Area, 2007
- Utah's Vital Statistics Births and Deaths, 2010
http://health.utah.gov/vitalrecords/pub_vs/ia10/10bx_10122011.pdf
- Vehicle Inspection/Maintenance Program Report, Davis County, Utah, 2011
- WIC Data, Davis County

County Description

Geography

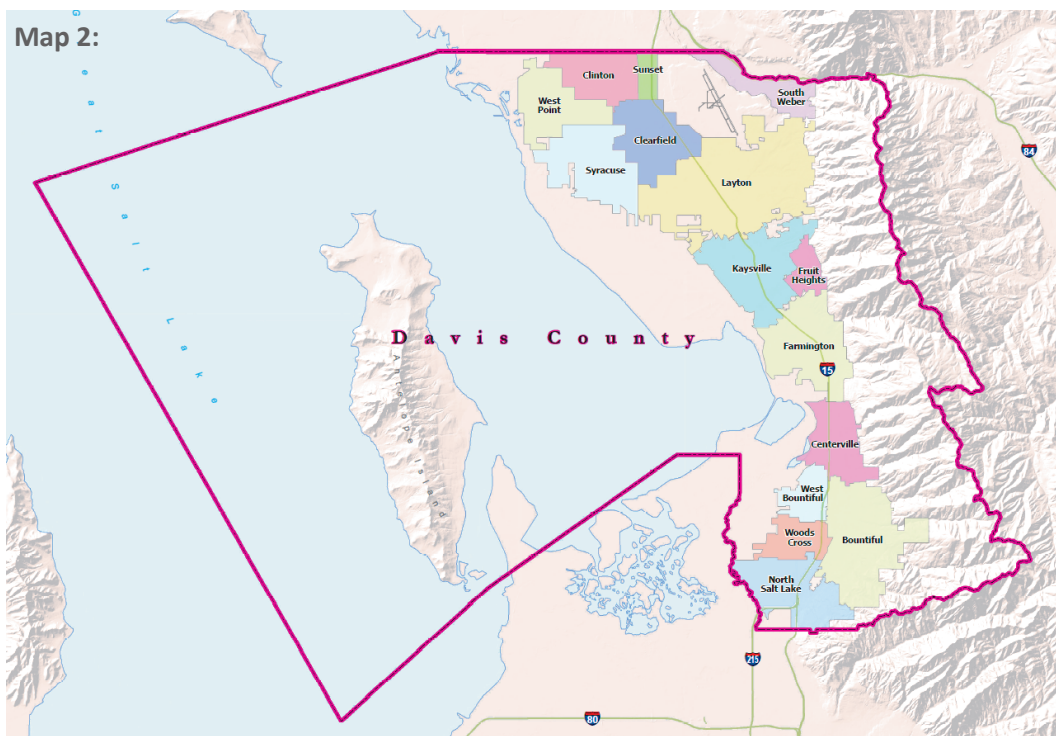
Davis County is a narrow strip of land along Utah's Wasatch Front. It is a suburban community just north of Salt Lake City and south of Weber County/Ogden. To the west is the Great Salt Lake and to the east is the Wasatch Mountain Range. By total land area, Davis County is the smallest county in Utah. It is 26.5 miles north to south and 37.5 miles east to west (including the Great Salt Lake). Out of the 635 square miles that make up the county, only 223 square miles are usable land. The remainder is part of the Great Salt Lake, including Antelope Island and the mountainside. Elevation is approximately 4,500 feet above sea level.⁴



Davis County is considered a bedroom community because of the proportion of the population that commutes to work in surrounding counties. Davis County's central location provides excellent access to housing, transportation, education, employment, healthcare facilities, entertainment, and recreation.

Government

The county seat is Farmington. A 3-member board of commissioners is the county's governing body. They are responsible for all county services and operations. They approve, adopt, and amend the budget. They also serve as the legislative body and regulate business licensing in the county's unincorporated areas. Davis County is comprised of 15 incorporated cities, as shown in Map 2.



County Description

Climate

Davis County is considered to be in a cold semi-arid climate, which means the climate can feature warm to hot summers and cold to very cold winters. Major temperature swings are common between day and night by as much as 55 degrees Fahrenheit.

Due to Davis County's bordering relationship with the Great Salt Lake, an occurrence called lake-effect snow can produce above-average snowfalls. This effect is caused by cold winds from the west that move across the expanse of the Great Salt Lake which doesn't freeze because of the salinity. Water vapor from the lake freezes and is deposited onto the relatively narrow section of Davis County that is sandwiched between the Great Salt Lake and the Wasatch Mountains, sometimes resulting in multiple feet of snow from lake effect alone. Lake-enhanced snowstorms are often attributed to creating what is locally known as "The Greatest Snow on Earth."



Transportation

The most important road in the county is Interstate 15, which runs north-south through the center of the county. Congestion can be a significant problem in the county, as east-west transportation is restricted by the narrow urban corridor and many citizens commute south to Salt Lake County.

US-89 enters parallel to I-15 from Salt Lake County to the south and runs north through North Salt Lake and Bountiful as a city road before merging with I-15. It re-emerges again in Farmington near the Lagoon Amusement Park, heading along the eastern benches on the slopes of the Wasatch Range, entering Weber County near South Weber.



The Legacy Parkway runs from the US-89/I-15 interchange in Farmington southward to connect with I-215 near the border with Salt Lake County. An extensive trail system, wetland protection measures, and landscaping were implemented along the highway in response to environmentalists' concerns, in addition to a lower speed limit and a ban of semi-trailer trucks on the highway.

FrontRunner commuter rail serves the length of Davis County with stations in Woods Cross, Farmington, Layton, and Clearfield.

Salt Lake International Airport is only 15–30 minutes South of Davis County.

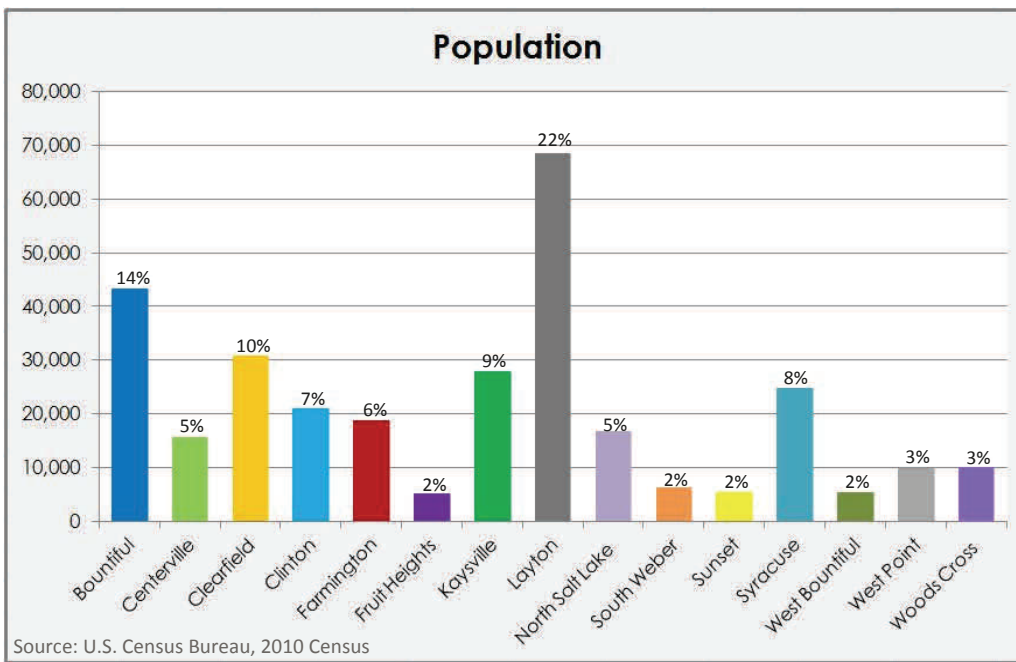
Demographic Profile

Population

Davis County's population was 306,479 in the 2010 Census, a 28.2% increase from 2000 (compared to a 23.8% increase for Utah). The population estimate for 2012 is 315,809. Approximately 11% of Utah's population lives in Davis County.⁵

Layton is the largest city with 68,495 residents, or 22% of the population. Fruit Heights is the smallest city with 5,076 residents, or 1.6% of the population. Sunset, the second smallest city with 1.7% of the population, was the only city in the county to experience a small decrease in population since 2000. Cities experiencing the most significant growth over the last 10 years include Syracuse with a 159% increase and North Salt Lake with an 87% increase. Most of the growth is concentrated in the northwest, northeast, and southwest portions of the county.

Graph 1: Population by City

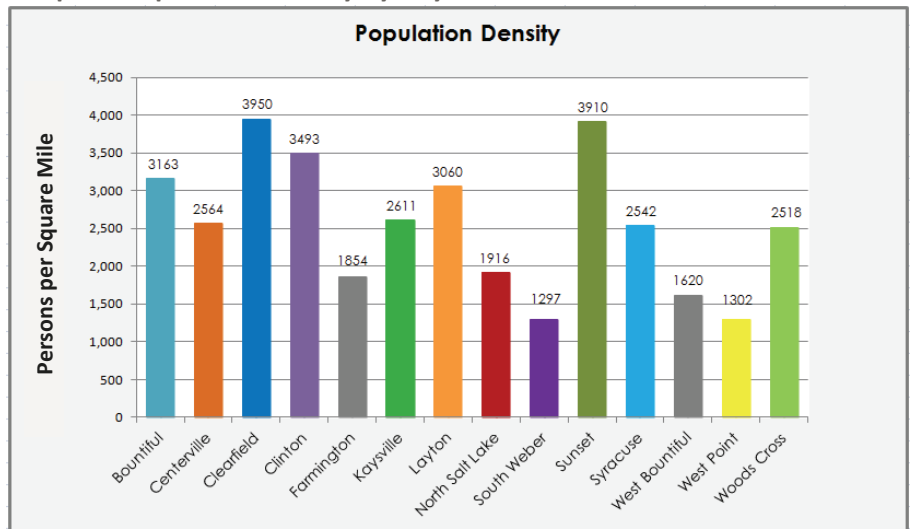


Just 2% of the county population is considered to be living in a rural area. Only 1% of the population of Davis County lives in unincorporated areas. Davis County is projected to build out with a population of approximately 440,000 people by the year 2050.⁴

Population Density

Davis County is the third largest county by population and smallest in size. The county's large population in a small area results in 1,026 persons per square mile (ppsm). For comparison, neighboring Salt Lake County has 1,387 ppsm and Weber County has 401 ppsm. Sunset and Clearfield have population densities of over 3,900 ppsm, which is more dense than the biggest cities in the state—Salt Lake City, West Valley, and Provo.

Graph 2: Population Density by City

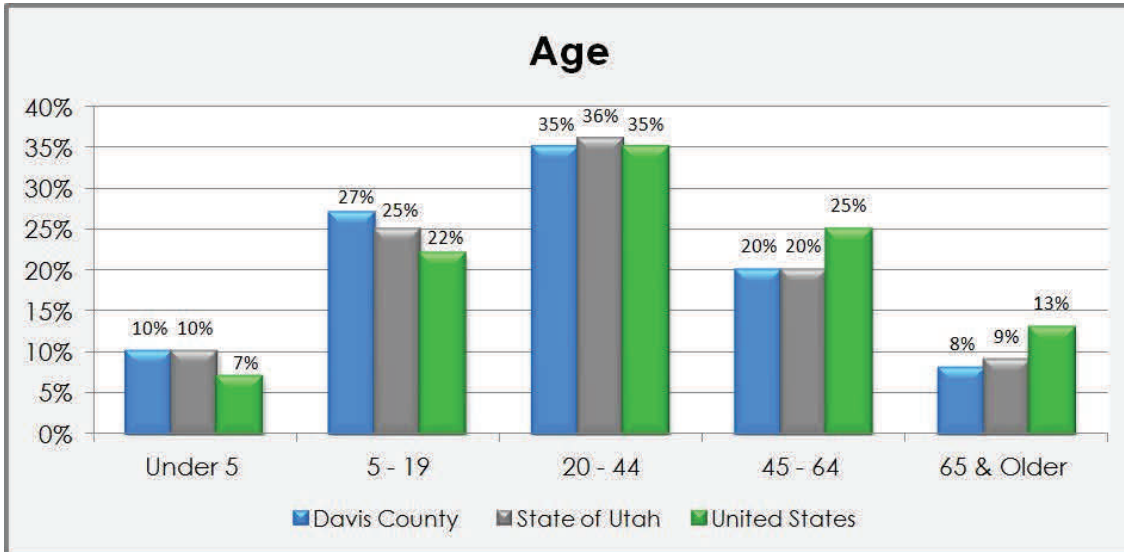


Demographic Profile

Age

Davis County has a young population. The median age is 29.2 years, which is equal to the median age of the state. Davis County's median age is up from 26.8 in 2000 which shows the county slowly getting older. Utah ranks as the youngest state in the U.S. with a median age of 29.2 years versus 37.2 nationally. The population is distributed across age categories with 10% under the age of 5, 27% ages 5-19, 35% ages 20-44, 20% ages 45-64 and 8% age 65 or older. In the overall population the percent of males and females is about equal. However, there are more males in the under 29 age categories and more females in older age categories.

Graph 3: Age Distribution

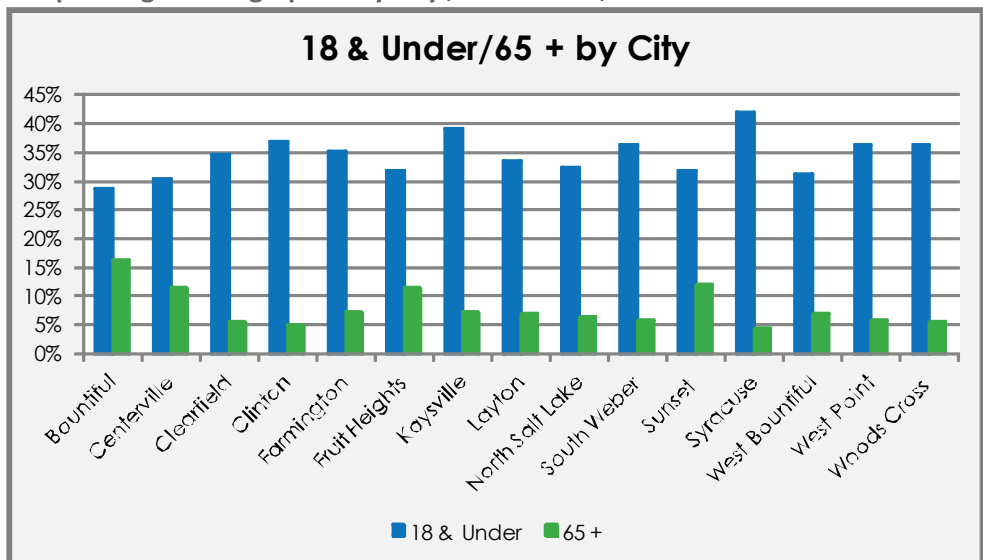


Source: U.S. Census Bureau, 2010 Census

Age demographics vary city by city and even by neighborhood. Two age groups with particular health needs include those age 18 and under and those age 65 and older. Persons under age 18 account for 34% of the population in Davis County. The state of Utah has 32% under age 18. Syracuse has the youngest population of all cities with 42% of residents under age 18 and Kaysville is second youngest with 39% under age 18.

Persons 65 years and over account for 8% of the county population and 9% of the state's population. Bountiful is the oldest city in the county with 16% of residents age 65+ and it is the only city that exceeds the U.S. percentage in this age category. Sunset is second oldest with 12% of residents age 65+.

Graph 4: Age Demographics by City, 18 & Under, 65+



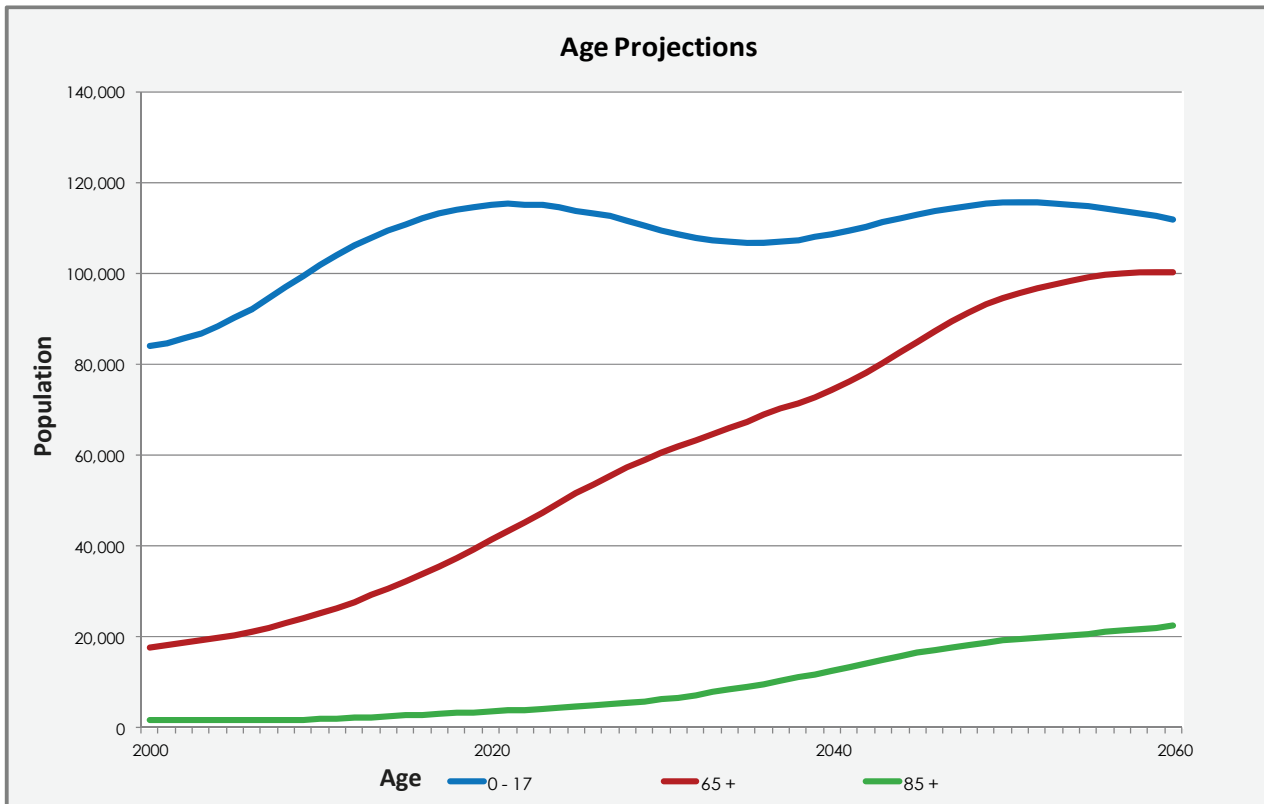
Source: U.S. Census Bureau, 2010 Census

Demographic Profile

Age Projections

While there is currently a young and healthy county population, major changes among the age distribution will occur over the next 20–30 years. Births are projected to remain stable. The school-age population is projected to increase over the next 10 years and then plateau. Projections for age 65+, including baby boomers, will experience significant growth, doubling every 10 years. Those age 85+ will double in 20–30 years.

Graph 5: Age Projections



Source: Governor's Office of Planning and Budget, 2008 Baseline Projections

Age Adjustment

Because many diseases, such as cancer and heart disease, are less common among younger people, Davis County's population is healthier than the U.S. population. In order to remove "age effect" so Davis County can be compared to the entire U.S. population or to other states, health data is often age adjusted for presentation in reports such as this one.

Demographic Profile

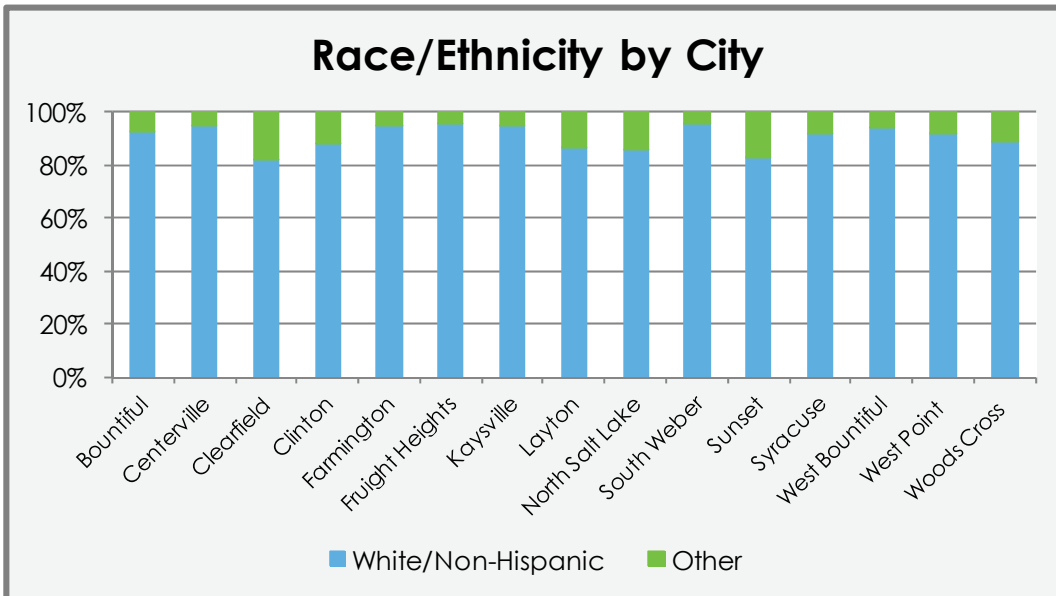
Race/Ethnicity

The racial makeup of the county is 90% white, 1.2% black or African American, 1.8% Asian, 0.5% American Indian/Alaska Native, 0.6% Pacific Islander, and 3.2% from other races. Those reporting 2 or more races represent 2.7%. Hispanic/Latinos are 8.4% of the population. Foreign-born residents account for 4.7% of the population, much less compared to 8.2% of Utahns and 12.7% of Americans. Of those foreign born in the county, 45% are U.S. citizens and 55% are not U.S. citizens. The population that has a language other than English spoken at home is 8.9%. This is also much lower than Utah at 14.2% and the U.S. at 20.1%. In Davis County, 3% of the population is not proficient in English compared with 6% in Utah.

The white, non-Hispanic population continues to be the largest in Davis County. However, the minority black, Asian, Pacific Islander, and Hispanic/Latino populations in Davis County are growing at faster rates than the county population as a whole.

Race distribution ranges from city to city varying from 82%–96% white. Cities surrounding Hill Air Force Base are the most diverse, including Clearfield (82% white) and Sunset (83% white). The least diverse cities by race/ethnicity are South Weber and Fruit Heights with 96% white and then Farmington, Centerville, and Kaysville with 95% white.

Graph 6: Race/Ethnicity by City



Source: U.S. Census Bureau, 2010 Census

Demographic Profile

Race/Ethnicity Comparisons

Davis County compared to Utah:

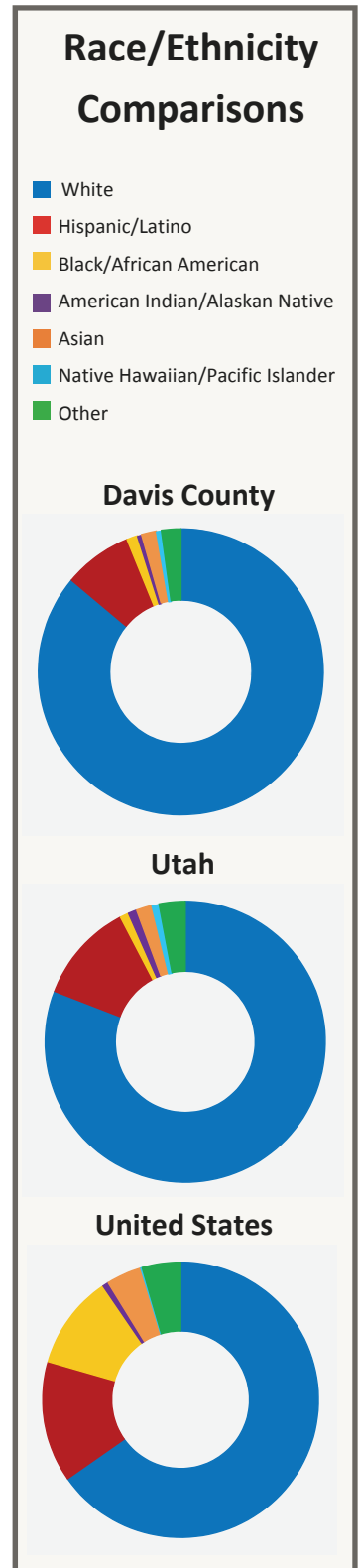
- A larger percentage of the Davis County population is white and non-Hispanic (90% versus 86%)
- A smaller percentage is Hispanic/Latino (8% versus 13%)
- The same percentage is black (1.2%)
- A smaller percentage is American Indian/Alaska Native (0.5% versus 1.2%)
- A smaller percentage is Asian (1.8% versus 2%)
- A smaller percentage is Native Hawaiian/Pacific Islander (0.6% versus 0.9%)

Davis County compared to the U.S.:

- A larger percentage of the Davis County population is white and non-Hispanic (90% versus 72%)
- A smaller percentage is Hispanic/Latino (8% versus 16%)
- A smaller percentage is black (1.2% versus 13%)
- A smaller percentage is American Indian/Alaska Native (0.5% versus 0.9%)
- A smaller percentage is Asian (1.8% versus 4.7%)
- A larger percentage is Native Hawaiian/Pacific Islander (0.6% versus 0.2%)

The proportion of non-white race groups in Davis County is still relatively small, which at times makes comparisons across racial and ethnic groups problematic. However, it is important to learn about the health disparities that exist among these groups and how they affect the overall health status of the county.

Graph 7: County Race/Ethnicity Compared to Utah, U.S.



Source: American Community Survey, 2007-2011

Social & Economic Characteristics

Workforce/Employment

Davis County has over 143,000 residents in the labor force. It is one of the youngest and most educated labor forces in Utah.

Hill Air Force Base, the state's largest employer, is located in Davis County. Lagoon, one of the Mountain West's largest amusement parks, is also centrally located in the county.

In Davis County, one-fourth of all jobs are in government (25,073 in year 2010), and Hill Air Force Base makes up the majority of those jobs. The economy in Davis County is heavily influenced by Hill Air Force Base. Over 20,000 people work at Hill Air Force Base, which includes military, civil service, and private contractors. This industry is followed closely by Trade, Transportation, & Utilities with 19,241 jobs. Other Davis County job counts by sector: Professional Services (11,805), Education, Health, and Social Services (11,071), Leisure & Hospitality (9,712), Manufacturing (8,991), Construction (6,742), Financial Activities (3,708), Other Services (2,781), Information (1,102), and Mining (136).⁴

The Freeport Center, located in Clearfield, is a major manufacturing, warehousing, and distribution center for the western U.S. It is home to more than 70 national and local companies that have a workforce of over 7,000 employees.

Additional employment and income factors are included in the social and economic indicator section of this document (pages 62–69).

Table 1: Largest Employers

Largest Employers, 2011		
Company	Industry	Employment
Hill Air Force Base	Federal Government	10,000–14,999
Davis School District	Local Government	7,000–9,999
Wal-Mart	Warehouse Clubs/Supercenters	7,000–9,999
Lifetime Products	Sports/Athletic Equipment Manufacturing	1,000–1,999
Lagoon Corporation Inc.	Amusement/Recreation	1,000–1,999
Smith's Marketplace	Grocery Store	500–999
ATK Space Systems/Alliant	Aerospace Manufacturing	500–999
Davis County	Local Government	500–999
Utility Trailer Manufacturing Co.	Truck Trailer Manufacturing	500–999
Davis Hospital and Medical Center	Healthcare	500–999
Lofthouse Bakery Products	Cookie/Cracker Manufacturing	500–999
Lakeview Hospital	Healthcare	500–999
South Davis Community Hospital Inc.	Healthcare	500–999

Source: Utah Department of Workforce Services, 2011

Social & Economic Characteristics

Cost of Living

There is no cost of living indicator specifically for Davis County. The Ogden Metropolitan Statistical Area (MSA) includes Clearfield in northern Davis County. The Salt Lake City MSA borders southern Davis County. Cost of living index is based on a U.S. average of 100. This measure is a reference for the amount consumers spend to obtain a certain standard of living. In 2012, the Ogden/Clearfield overall score was 94.3 and for Salt Lake City it was 95.2. Both are slightly below the national average, indicating the average price of goods and services for those living in this area is less than in other cities. The area is not considered to be an expensive place to live, but this is all relative depending on which other cities or MSAs it is compared to.

Table 2: Cost of Living Comparison

Cost of Living Comparison			
Cost of Living Category	Ogden/Clearfield MSA	Salt Lake City, UT	United States
Overall	94.3	95.2	100
Grocery	97.3	95.2	100
Health	89.2	89.2	100
Housing	84	88.9	100
Utilities	91.1	82.4	100
Transportation	101.6	101.1	100
Miscellaneous	100.6	101.4	100

Source: Davis County Community & Economic Development, 2012

Education

Public education in Davis County is served by the Davis School District, the second largest school district in the state. There are currently 59 elementary schools, 16 junior high schools, 8 high schools, and 3 alternative schools in the district. The Davis School District has 18 Title 1 schools (17 elementary, and 1 junior high). An additional 20 charter/private schools are in the county.

Davis Applied Technology College (DATC) is Davis County's largest institution of higher education. It is a public technical training center located in Kaysville. It provides competency-based education in an open-entry, open-exit environment that prepares students with career and technical skills in more than 31 programs, certificates, and trades. There are other private vocational colleges within the county as well.



Weber State University operates its Davis campus in Layton, offering 21 different associates, bachelors, and masters degrees and certificate programs. Utah State University owns and operates the Utah Botanical Center in Kaysville, which includes an education center. Additional education information is included in the social and economic indicator section of this document (pages 62-69).

Social & Economic Characteristics

Religion

Many Davis County residents are religious, 82.3% of the people affiliate with a religion compared to 73.24% in Salt Lake City and 48.78% in the U.S. Nearly 75% of residents are LDS (The Church of Jesus Christ of Latter Day Saints, also known as Mormons) compared to 59.34% in Salt Lake City and 2% in the U.S.

Davis County has 599 religious congregations. Of those, 550 (92%) are LDS congregations. Forty-nine other congregations exist in the county, including Assembly of God, Baha'i Faith, Baptist, Buddhist, Church of Christ, Episcopal, Jehovah's Witness, Lutheran, Nazarene, Presbyterian, and other non-denominational churches.⁶

Table 3: Religious Affiliation

Religion	Davis County	Salt Lake	United States
Percent Religious	82.37%	73.24%	48.78%
Catholic	4.17%	8.71%	19.43%
LDS	74.66%	59.34%	2.03%
Baptist	1.08%	0.84%	9.30%
Episcopalian	0.09%	0.26%	0.63%
Pentecostal	1.15%	0.73%	1.87%
Lutheran	0.19%	0.53%	2.33%
Methodist	0.07%	0.43%	3.93%
Presbyterian	0.11%	0.39%	1.63%
Other Christian	0.35%	1.01%	5.51%
Jewish	0.00%	0.08%	0.73%
Eastern	0.48%	0.48%	0.53%
Islam	0.02%	0.44%	0.84%

Source: www.bestplaces.net

The Bountiful, Utah, Temple of the Church of Jesus Christ of Latter Day Saints is located in Davis County, on Bountiful's east bench. The Thai Buddhist Temple is located in Layton.



Social & Economic Characteristics

Politics

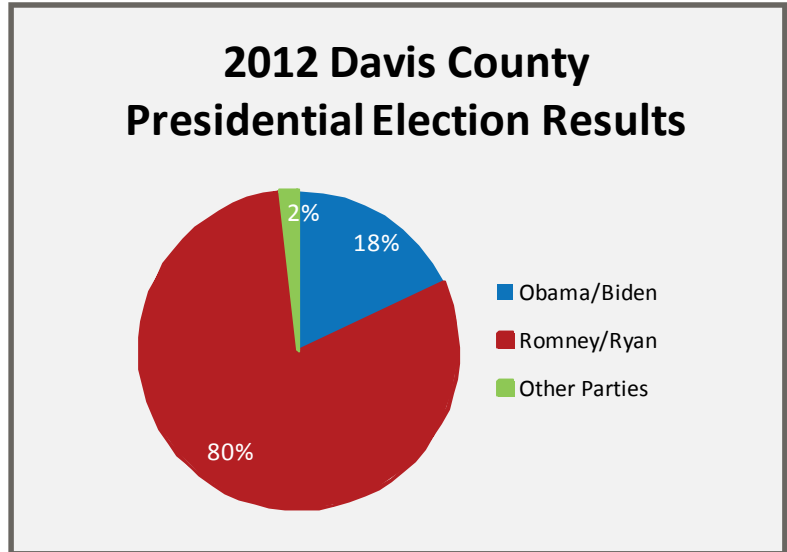
Davis County currently has 180,418 registered voters. Approximately 90% of eligible voters are registered.

Voter affiliation:

- 87,671 Republican
- 13,355 Democrat
- 335 Constitution
- 774 Libertarian
- 78,283 Unaffiliated

In the 2012 presidential election, 77% of registered voters voted. Eighty percent of residents who voted cast their ballot for Mitt Romney.⁷

Graph 8: 2012 Election Results



Source: Davis County Clerk/Auditor

Republicans dominate politics in Davis County. Elected officials typically have very conservative ideologies. Political views that resonate with residents are a belief in a Divine Providence and recognition of the need for moral and spiritual foundations. There is much support for the freedoms expressed in the Declaration of Independence and protected in the Constitution of the United States of America. There is support for the free market and a belief that the market is right. The community is passionate about states' rights and less government regulation. There is a lot of concern about state and federal mandates, including federal healthcare laws. Community values shaping politics are personal responsibility and individual choice, the idea that you get what you work for. Thrift is a common value, the idea of getting the most bang for the buck. There is strong defense for property rights and individual rights. While there is not support for the government providing handouts to individuals and groups, the community takes pride in taking care of each other through community service, volunteering, and charitable donations. Residents value and enjoy freedoms. They take pleasure in being productive citizens who have a high quality of life.

Healthcare

There are 2 main hospitals in Davis County, Davis Hospital and Medical Center in Layton, and Lakeview Hospital in Bountiful. In addition, South Davis Community Hospital is a specialty hospital for rehabilitation, transitional care, and long-term care in Bountiful.

Intermountain healthcare, the largest healthcare provider in Utah, does not operate a hospital in Davis County. Davis County does not have a Level 1 Trauma Center within its boundaries. Residents needing the highest level of surgical care are sent to Salt Lake or Ogden.

Additional healthcare indicators will be presented in the clinical care factor section of this document (pages 50-61).

Special Populations

Military Population

Hill Air Force Base (HAFB) is a unique feature of Davis County. Residents on base total 3,310. The average age is 22 years old, and 55% are male and 45% are female. HAFB is the most diverse of all zip codes in the county with 82% of residents who are white. There are 1,000 housing units on base. Additional active-duty personnel live off base.



In addition to active-duty employees, HAFB has a high number of civilians working on base, more than 15,000. In general, the military population is more transient than the rest of the community. They do not consider Davis County to be home and don't usually identify as Utahns or even Davis County residents. As typical for military communities, there are more multi-unit housing structures and fewer home owners in the cities surrounding the base. The base borders Weber County to the north.

Persons with Disabilities

It is estimated that 24,495 people in Davis County have a disability. This represents 8% of the population. Those 65 years and over are most disparately affected by disabilities. In this age group about 34.5% have a disability.

Veterans

Davis County is home to 20,272 veterans, representing 10.7% of the adult population. We have a higher percentage of veterans than Utah (8.3%) and the U.S. (10.1%) due to having an air force base in our community.

Homeless

Davis County has a very small homeless population and does not have a designated homeless shelter. According to the Davis School District in 2011, 1,523 children within 1,293 families were considered homeless. This includes families doubled up with friends or relatives because they cannot find or afford housing.

Incarcerated

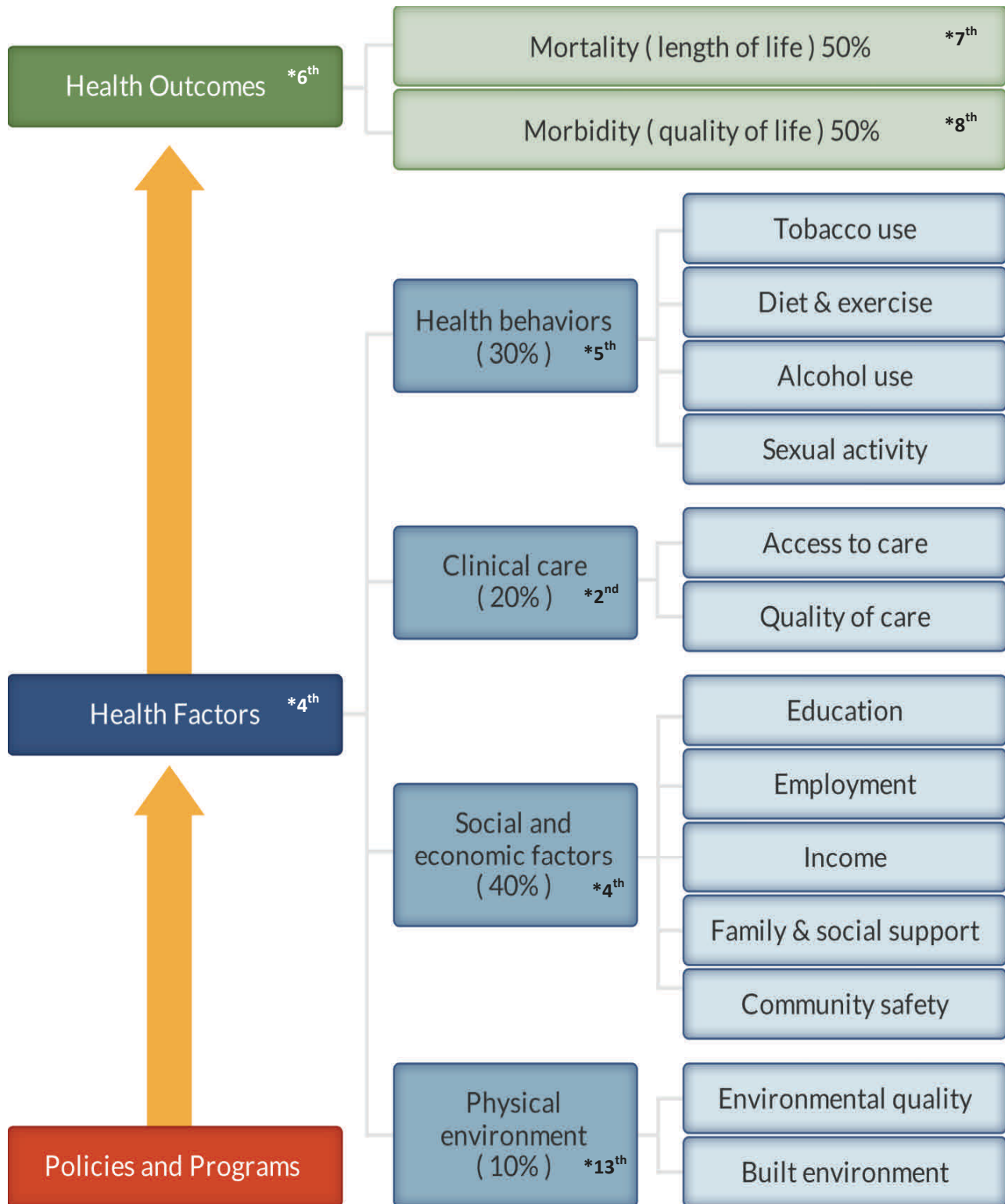
The Davis County Jail is located in Farmington. It houses an average daily population of 800 inmates. Male to female ratio is 7:1.

Job Corps

In Davis County there are 2 Job Corps centers operated by the U.S. Department of Labor. Students ages 16–24 live on center in dorms and are provided career training. Job Corps provides academic training, including basic reading and math. Courses in independent living, employability skills, and social skills are offered to help students transition into the workplace. Students come from all over the country. Fifty percent of students are ethnic minorities. Although many students are not from Utah, they spend 1–3 years living in the county and assimilating into the community. Clearfield Job Corps houses about 1,100 students and Weber Basin Job Corps houses about 210 students.

County Health Rankings

The County Health Rankings is a good starting point for a local community health status assessment. The County Health Rankings model is shown below. The Davis County rank for each area is included.



Health Outcomes

Health outcomes in the CHR represent how healthy a county is. They measure 2 types of health outcomes: how long people live (mortality) and how healthy people feel while alive (morbidity). The analysis allows Davis County residents to see how they compare to other counties in Utah.

The 2013 CHR show Davis County is the 6th healthiest county in Utah out of 27 ranked counties. Davis County's ranking of 6th is based on a composite score of mortality and morbidity measures. Davis County was ranked in the top 5 for the first 3 years of rankings.

Table 4: County Health Rankings
Health Outcomes Utah Summary

Rank	Health Outcomes
1	Morgan
2	Cache
3	Utah
4	Wasatch
5	Summit
6	Davis
7	Wayne
8	Washington
9	Box Elder
10	Millard
11	Salt Lake
12	Garfield
13	Iron
14	San Juan
15	Sanpete
16	Beaver
17	Tooele
18	Weber
19	Kane
20	Piute
21	Grand
22	Emery
23	Juab
24	Uintah
25	Duchesne
26	Sevier
27	Carbon

Not ranked: Daggett, Rich

Health Outcomes

Davis County is ranked as the 6th healthiest county in Utah.

Davis County was ranked in the top 5 for the first 3 years of the County Health Rankings.

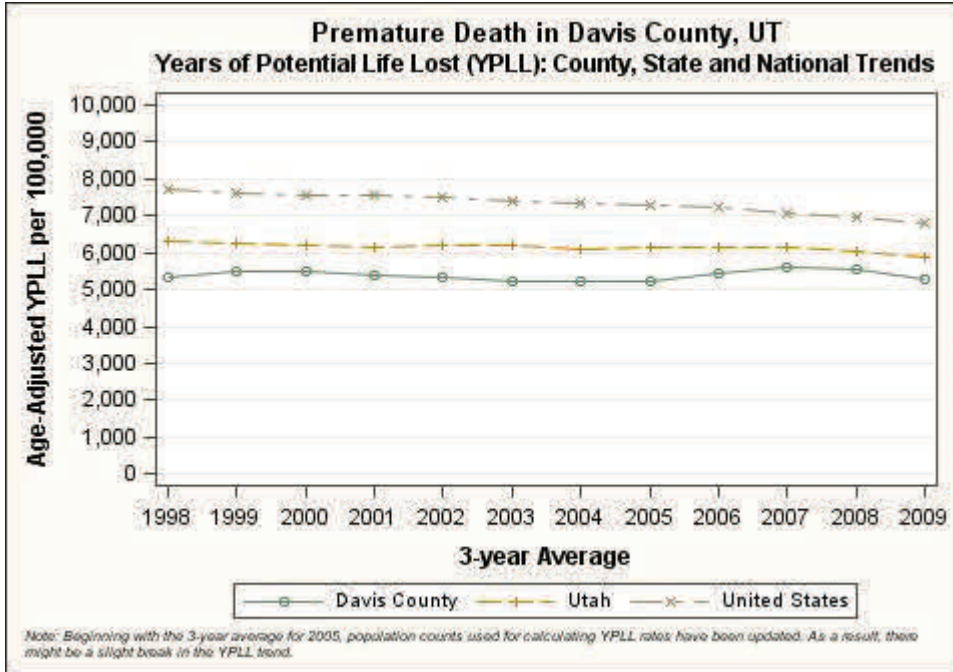
Davis County Health Department believes there is room for improvement.

Mortality

Premature Death

Premature death is represented by Years of Potential Life Lost (YPLL) before age 75. Every death occurring before age 75 contributes to the total number of years of potential life lost. Davis County's measure is 5,264 YPLL, which is better than 5,516 YPLL in 2012. Davis County's mortality ranking is 7th (down from 5th in 2013). Although the county measure didn't get worse between 2012-2013, the ranking went down because other counties in Utah also made improvements.

Graph 9: Premature Death Trends, Davis County, Utah, U.S.



Source: CHR, 2013

Table 5: Mortality Indicators

Mortality	Davis	Utah	U.S.	Source
Premature Death, Years of Potential Life Lost Before Age 75 (2008-2010)	5264	5869	6811	CHR
Death Rate, per 100,000 (2010)	590.9	674.7	792.6	IBIS, UDOH
Life Expectancy (2006-2010)	80.5	80.4	78.5*	DCCS, UDOH

*2009

Death Rate & Life Expectancy

The lower the death rate, the higher the life expectancy, which is currently 80.5 years in Davis County. Factors contributing to low death rates and long life expectancy in the community include healthy lifestyles (especially low rates of tobacco, alcohol, and substance use), lower rates of poverty, and better access to healthcare. Important implications of decreasing death rates and increasing life expectancy are that there are increasing numbers of older individuals and people living with chronic illnesses. This trend will place increasing economic demands on the healthcare system, including aging services, long-term care, and assisted living.

Mortality

Premature death is the only mortality measure in the County Health Rankings.

Davis County is doing well in this category & is in the top 10% (best) of all counties in the U.S.

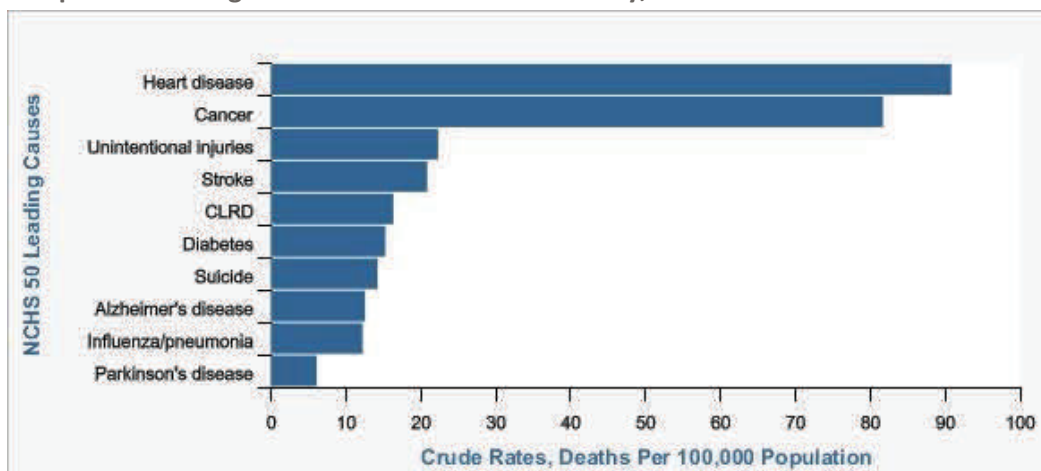
Davis County is ranked 7th for mortality.

Leading Causes of Death & Chronic Disease Death Rates

Leading Causes of Death

The leading causes of death overall in Davis County are heart disease, cancer, unintentional injury and stroke. Influenza/pneumonia deaths are the only infectious diseases in the top 10.

Graph 10: Leading Causes of Death in Davis County, 2012



Source: DCCS, UDOH

Chronic Disease Death Rates

The 2 leading causes of death in Davis County are heart disease and cancer. Although they are the most common causes of death in the county, we compare well in these indicators and are meeting HP2020 targets. At a national level, Utah is ranked best in the nation for cancer deaths and second best in the nation for coronary heart disease deaths.⁸ This is primarily due to low tobacco use and alcohol use rates across the state. Davis County is not meeting the HP2020 target for prostate cancer deaths.

Table 6: Chronic Disease Death Rates

Chronic Disease Death Rates	Davis	Utah
Coronary Heart Disease Deaths (2006-2010)	72.5	70.1
Stroke Deaths (2006-2010)	30.9	36.1
Prostate Cancer Deaths (2006-2010)	24*	24.3
Alzheimer's Disease Deaths (2008-2010)	22.6	19.6
Diabetes—Underlying Cause-Deaths (2009-2011)	22.1	23.5
Breast Cancer Deaths (2008-2010)	20.3	20.2
Lung Cancer Deaths (2006-2010)	16	20.6
Colorectal Cancer Deaths (2007-2010)	10.5	11.6
Melanoma of the Skin Deaths (2005-2010)	2.1	—

Source: DCCS & IBIS, UDOH, Age-adjusted per 100,000) *Not meeting the HP2020 Target 21.2

Chronic diseases such as heart disease, stroke, cancer, and diabetes are among the most common, costly, and preventable of all health problems.

Chronic Disease Death Rates

Davis County is meeting the Healthy People 2020 targets for coronary heart disease & cancer deaths.

Utah is ranked best in the nation for cancer deaths & second best for coronary heart disease deaths.

Davis County is meeting the Healthy People 2020 targets for all chronic disease death rates except prostate cancer.

Injury Death Rates

Injury deaths are often classified as unintentional or intentional. The categories in the table below are not mutually exclusive. For example, unintentional injury deaths include motor vehicle traffic crash deaths and some poisonings, and poisonings may be unintentional or intentional (suicide).

Table 7: Injury Death Rates

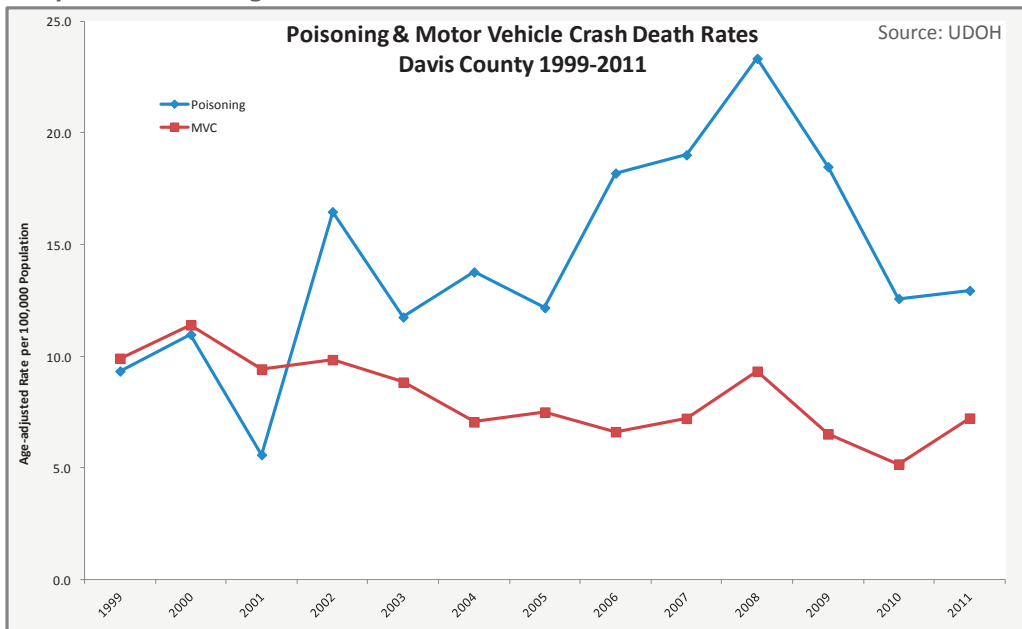
Injury Deaths	Davis	Utah	U.S.	Source
Unintentional Injury Deaths (2007–2009)	29.6	34.3	37.2	IBIS, UDOH
Poisoning Deaths (2006–2009)	17.4*	18.8	13.1	DCCS, UDOH
Suicide (2006–2009)	15.1*	15.8	11.4	DCCS, UDOH
Motor Vehicle Traffic Crash Deaths (2008–2010)	6.8	9.2	11.1	DCCS, UDOH

Age-adjusted per 100,000 *Not meeting HP2020 Target 13.1 for Poisonings & 10.2 for Suicide

Davis County has the lowest unintentional injury rate out of Utah’s 12 local health districts at 29.6 per 100,000 population. Davis County also has the lowest motor vehicle crash death rate at 6.8 per 100,000 population. This low rate puts Davis County in the top 10% (best) in the country for this indicator. However, Davis County has one of the highest percentages of crashes and fatalities involving a teen driver in Utah.⁹ The top 5 leading causes of unintentional injury death for all ages in Utah were poisoning, motor vehicle crashes, falls, suffocation, and drowning.

Over the last 10 years, poisoning deaths surpassed the rate of motor vehicle crash deaths in Davis County and Utah. Drugs, in particular prescription pain medications, are responsible for many poisoning deaths.

Graph 11: Poisoning & Motor Vehicle Crash Death Rates



The most common substances reported to Utah Poison Control in 2011 from Davis County residents are pain killers, cosmetics/personal care items, and household cleaners.

Injury

Davis County has the lowest unintentional injury & motor vehicle crash death rates out of all of Utah’s 12 local health districts.

Poisoning deaths is an indicator where Davis County & Utah compare poorly with the U.S. & are not meeting the Healthy People 2020 target, which is 13.1 deaths per 100,000 population.

Suicide

In Davis County, there are 14.68 deaths due to intentional self-harm (suicide) per 100,000 population (crude rate). Age-adjusted rates are also provided for comparison.

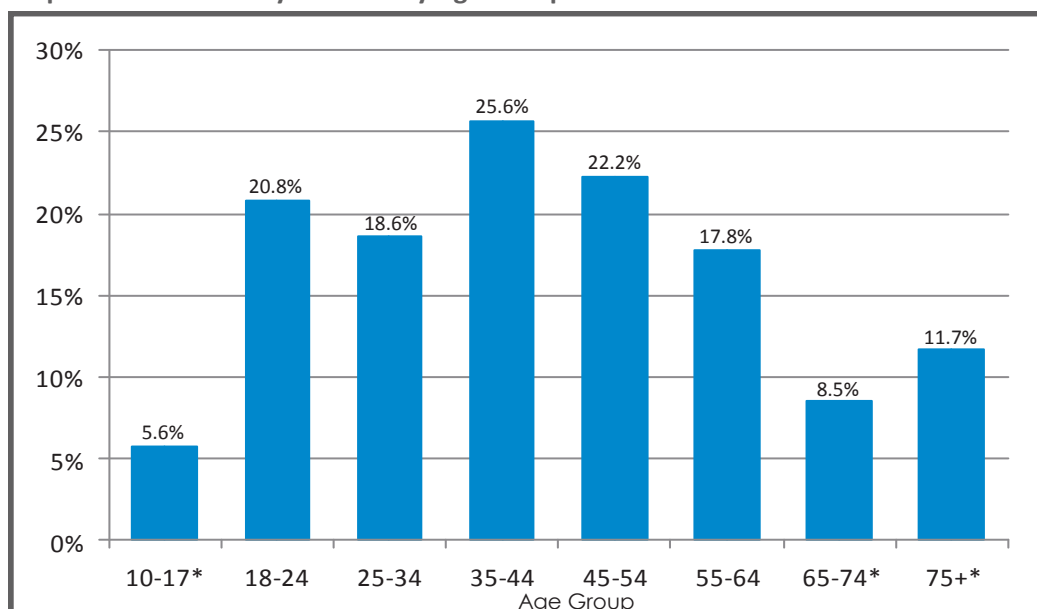
Table 8: Suicide Rates

Data Source: CHNA.org

Report Area	Total Population, 2006–2010 Average	Annual Deaths, 2006–2010 Average	Crude Death Rate (per 100,000 Pop.)	Age-Adjusted Death Rate (per 100,000 Pop.)
Davis County	294,256	43	14.68	15.95
Utah	2,654,718	410	15.46	16.81
United States	303,844,430	35,841	11.80	11.57
<u>HP2020 Target</u>				<= 10.2

Suicide is the seventh leading cause of death in Davis County. There are no significant differences in suicides rates between Davis County, Davis County small areas, and the state. Males have a significantly higher suicide rate compared to females. Persons 35–44 years old had the highest suicide rate in Davis County. In 2011, 9.5% of Davis County secondary students had considered suicide according to the Prevention Needs Assessment Survey (PNAS).¹⁰

Graph 12: Davis County Suicides by Age Group



Data Source: UDOH, 2006–2010 *Use caution when interpreting results, the estimate may be unreliable.

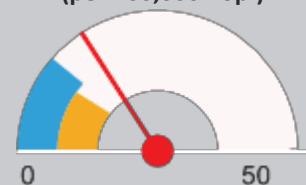
Suicide is an indicator of poor mental health. A CDC report on suicide found that Utah had the highest estimated prevalence of suicidal thoughts among adults in the nation.¹¹

Suicide

Suicide is an indicator where Davis County & Utah compare poorly with the U.S. and are not meeting the Healthy People 2020 target.

Graph 13: Suicide Comparison Scale

Age-Adjusted Death Rate (per 100,000 Pop.)



- Davis County
- HP2020 Target 10.2
- United States

Data Source: CHNA.org

Suicide was identified as an important health issue to Davis County residents in the 2012 Key Informant Survey.

Locally, Syracuse City, Davis School District, Intermountain Healthcare & Hill Air Force Base have made preventing suicide a priority.

Infant Mortality

The infant death rate is a critical indicator of the health of a population. It is a worldwide indicator of health status and social well-being. The leading causes of infant and child mortality in Davis County include birth defects, conditions in the perinatal period, and other medical conditions.

Table 9: Infant/Child Mortality Indicators

Infant/Child Mortality Measures	Davis	Utah	U.S.	Source
Infant Mortality, Deaths/1,000 Live Births (2006–2010)	5.3	5	6.6*	DCCS, UDOH
Child Mortality, Crude Rate Under 18 (2007–2010)	51	53	—	CHR

*2006–2009

If infant mortality is examined in a small area data report, there are some areas of the county that are not meeting the HP2020 target of 6 infant deaths per 1,000 live births. Small areas of concern include Clearfield/HAFB and Woods Cross/North Salt Lake.

Table 10: Infant Mortality by Small Area

Infant Mortality in Davis County by Small Area (2007–2011)	Deaths per 1,000 Live Births
Clearfield/Hill AFB	8.2
Layton	6.2
Syracuse/Kaysville	3.6
Farmington/Centerville	3.4*
Woods Cross/North Salt Lake	7.2
Bountiful	5.1

*Use caution in interpreting, as the estimate has a relative standard error greater than 30%. Source: IBIS, UDOH

Risk Factors

Some of the mother’s behaviors during the perinatal period are associated with an increased risk of infant mortality, including:

- poor nutrition
- inadequate or excessive weight gain
- lack of prenatal care
- use of tobacco products and alcohol

Infant Mortality

Davis County is meeting the Healthy People 2020 target for infant mortality, which is 6 infant deaths per 1,000 live births.

If infant mortality is examined in a small area data report, there are some areas of the county that are not meeting the target.

Small areas of concern include Clearfield/HAFB & Woods Cross/North Salt Lake.

Morbidity

Morbidity refers to how healthy people feel while alive. CHR reports on morbidity measures of health-related quality of life (overall health, physical health, mental health) and also birth outcomes. Davis County is ranked 8th for morbidity out of the 27 ranked counties in Utah.

Health-Related Quality of Life

Health-related quality of life (HRQoL) is a multi-dimensional concept that includes physical, mental, emotional, and social functioning. It focuses on the impact health status has on quality of life. The CDC has defined HRQoL as “an individual’s or group’s perceived physical and mental health over time.” Measuring HRQoL helps characterize the burden of disabilities and chronic diseases in a population.

Table 11: Health-Related Quality of Life Indicators

Health-Related Quality of Life (2005-2011)	Davis	Utah	National Benchmark*	Source
Poor or Fair Health	10%	13%	10%	CHR
Poor Physical Health Days	3.2	3.4	2.6	CHR
Poor Mental Health (2011)	13.8%	15.8%	—	DCCS, UDOH
Poor Mental Health Days	3	3.2	2.3	CHR

Age-adjusted * 90th percentile; i.e., only 10% are better

The CHR use 3 county-level measures from the Behavioral Risk Factor Surveillance System (BRFSS) data provided by the CDC as measures of health-related quality of life: the percent of adults reporting poor or fair health, and the average number of physically and mentally unhealthy days reported per month. Additionally, this report adds percentage of adults aged 18 years and older who report 7 or more days when their mental health was not good in the past 30 days.

Physical Health

Self-reported health status is a general measure based on survey responses to the question: “In general, would you say that your health is excellent, very good, good, fair, or poor?” The value reported in the CHR is the percent of adult respondents who rate their health “fair” or “poor.” For Davis County the measure is 10% which is in the top 10% (best) in the country. When asked to quantify how many days during the past 30 days that their physical health was not good, the average number of days for adults was 3.2.

Mental Health

The percent of adult residents who report 7 or more days when their mental health was not good in the past 30 days was 13.8%. When asked to quantify how many days during the past 30 that their mental health was not good, the average number of days for adults was 3.

Morbidity

Morbidity refers to how healthy people feel while alive.

County Health Rankings reports on morbidity measures of health-related quality of life (overall health, physical health, mental health) & also birth outcomes.

Davis County is ranked 8th for morbidity.

Birth Outcomes

Birth outcomes are a category of measures that describe health at birth. These outcomes, such as low birth weight, represent a child’s current and future morbidity, or whether a child has a healthy start. Other birth outcomes examined include birth rates, gestational diabetes, births from unintended pregnancies, and adolescent births (included as teen birth rate in CHR).

Table 12: Birth Outcome Indicators

Birth Outcomes	Davis	Utah	U.S	Source
Birth Rates, # of Births per 1,000 Residents (2010)	18.6	18.3	13.5	DCCS, UDOH
Low Birth Weight (2008–2010)	6.8%	6.9%	8.2%	DCCS, UDOH
Gestational Diabetes (2009–2010)	2.8%	3.4%	—	IBIS, UDOH
Births from Unintended Pregnancies (2008–2010)	28.0%	33.4%	51.0%	IBIS, UDOH
Adolescent Births, Rate per 1,000 Adolescent Females Ages 15-19 (2008–2010)	20.2	23.1	39.1	DCCS, UDOH

Birth rates in Utah are the highest in the nation, over 18 births per 1,000 residents. Davis County birth rates are similar to the state average. Birth rates have been gradually declining in Davis County, Utah, and the U.S. birth rates directly relate to a population’s need for timely and appropriate preconception, prenatal, neonatal, and postpartum care. Birth rates also provide understanding about population growth and change.

Davis County’s low birth weight (LBW) rate of 6.8% is similar to that of the state and lower than the U.S. at 8.2%. LBW is defined as less than 2,500 grams, or about 5 pounds, 8 ounces. LBW represents multiple factors: maternal exposure to health risks, the infant’s current and future morbidity, and premature mortality risk. LBW serves as a predictor of premature mortality and/or morbidity over the life course. This indicator is relevant because LBW infants are at high risk for health problems. This indicator can also highlight the existence of health disparities.

Davis County’s rates for gestational diabetes, births from unintended pregnancies, and adolescent births are lower than state and national averages. There are significant differences in rates across Davis County’s 6 small areas, but none of them are higher than the state average.

Birth Rates

Birth rates in Utah are the highest in the nation. Davis County birth rates are similar to the state average.

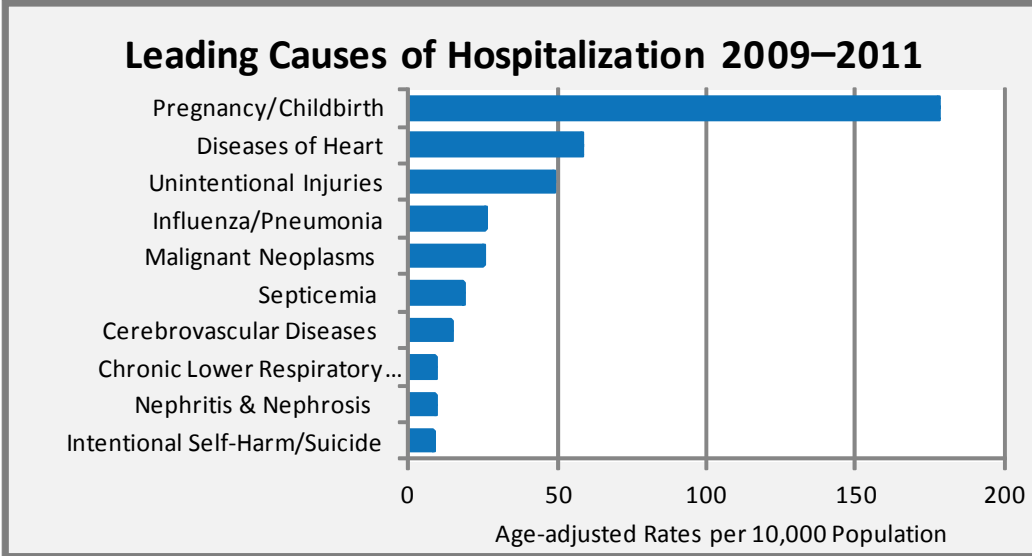
Birth rates have gradually been declining in Davis County, Utah & the U.S.

Davis County is better than the national average for low birth weight, gestational diabetes, unintended pregnancies & adolescent births.

Hospitalizations

The leading cause of hospitalization in Davis County is childbirth. Heart disease, unintentional injury, influenza/pneumonia and cancer also rank high. Intentional self-harm/suicide also makes the top 10.

Graph 14: Leading Causes of Hospitalization in Davis County



Source: Violence & Injury Prevention Program (VIIPP), UDOH

Hospitalizations

Davis County rates are better than state rates when it comes to diabetes & asthma hospitalizations as well as motor vehicle crash & asthma-related emergency department encounters.

Residents in the Woods Cross/North Salt Lake area have more asthma-related hospital visits.

Residents in the Clearfield/HAFB area have more motor vehicle crash hospital visits.

Table 13: Hospitalization & Emergency Department Encounter Indicators

Hospitalizations & Emergency Department Encounters	Davis	Utah	Source
Fall Hospitalizations (2010)	22.5	22.4	DCCS, UDOH
Heart Attack Hospitalizations (2000–2010)	11.4	10.5	IBIS, UDOH
Diabetes Hospitalizations (2010)	6.7	8.9	IBIS, UDOH
Asthma Hospitalizations (2007–2011)	4.1	5.2	IBIS, UDOH
Motor Vehicle Crash ED Visits (2004–2006)	75.1	91.5	IBIS, UDOH
Asthma-related ED Visits (2009–2010)	18.2	23.6	DCCS, UDOH

Age-adjusted Rate per 10,000 Population

When examining hospitalization and emergency department (ED) encounter data, Davis County rates are better than state rates when it comes to diabetes and asthma hospitalizations as well as motor vehicle crash and asthma-related ED encounters.

When rates are examined by small area, asthma hospitalizations and ED visits are significantly higher in the Woods Cross/North Salt Lake area. Motor vehicle crash ED visits are significantly higher for residents in the Clearfield/HAFB area. Bountiful area has a higher rate of emergency department visits due to falls.

Chronic Disease Prevalence

Chronic diseases are the leading causes of death and disability in Davis County. Four common causes of chronic disease are modifiable behaviors: lack of physical activity, poor nutrition, tobacco use, and excessive alcohol consumption. Indicators for these risk factors are in the behavior section (pages 43–49).

Table 14: Chronic Disease Prevalence Indicators

Chronic Disease Prevalence	Davis	Utah	U.S	Source
High Blood Cholesterol* (2009, 2011)	27.3%**	25.4%	28.4%	DCCS, UDOH
Hypertension* (2009, 2011)	25.4%	25.6%	30.0%	DCCS, UDOH
Heart Disease Prevalence (2006–2010)	2.3%	2.7%	4.3%	CHNA.org
Arthritis Prevalence* (2011)	22.0%	21.8%	23.4%	IBIS, UDOH
Asthma: Adult Prevalence* (2011)	10.2%	8.7%	8.7%	IBIS, UDOH
Asthma: Adolescent Prevalence, Grades 6–12 (2011)	11.9%	12.1%	—	PNAS
Asthma: Childhood Prevalence, Ages 0–17 (2007–2010)	7.1%	7.1%	8.4%	IBIS, UDOH
Diabetes: Adult Prevalence* (2009–2011)	6.5%	7.5%	8.8%	DCCS, UDOH
Diabetes: Adolescent Prevalence, Grades 6–12 (2011)	1.04%	0.97%	—	PNAS

*Age-adjusted **Not meeting HP2020 target 13.5%.

Diabetes

State adult diabetes prevalence rates are some of the lowest in the country at 7.5%. Davis County is even lower at 6.5%. Diabetes is a disease that can have devastating consequences. It is the leading cause of non-traumatic lower-extremity amputation and renal failure. It is also the leading cause of blindness among adults younger than 75. It is one of the leading causes of heart disease. Diabetes has reached epidemic proportions in the U.S. It is estimated that about one-fourth to one-third of people with diabetes don't know they have it and are not yet diagnosed. Many others have pre-diabetes, a condition that puts them at high risk for developing diabetes unless steps are taken to prevent it.

Asthma

Davis County has the highest adult asthma prevalence in Utah at 10.2% compared to the state and nation, both at 8.7%. The Davis County rate for all ages combined is 9.5%, also the highest in the state. Asthma is a serious personal and public health issue that has far-reaching medical, economic, and psychosocial implications. The burden of asthma can be seen in the number of asthma-related medical events, including emergency department visits, hospitalizations, and deaths.

Alzheimer's Disease

Alzheimer's Disease is another chronic condition of note. Prevalence rates are not available at this time. Prevalence of Alzheimer's and other dementias is projected to increase significantly over the next 10–20 years as baby boomers age and the population gets older.

Chronic Disease Prevalence

Adult diabetes is low in Davis County compared to the U.S. Healthy People 2020 targets are being met.

Diabetes was identified as a top health priority for adults in the 2012 Key Informant Survey.

Asthma is the most common chronic disease in children & the top chronic disease issue identified for children in the 2012 Key Informant Survey.

Cancer Incidence

Cancer incidence measures the number of new incidents of cancer in a population during a given time.

Table 15: Cancer Incidence Indicators

Cancer Incidence	Davis	Utah	U.S	Source
Prostate Cancer Incidence	195.4	169.8	151.4	CHNA.org
Breast Cancer Incidence	110.6	108	122	CHNA.org
Colon & Rectum Cancer Incidence	37.3	35	40.2	CHNA.org
Lung Cancer Incidence	20.9	27.7	67.2	CHNA.org
Brain & Central Nervous System Cancer*	6.9	6.4	—	IBIS, UDOH
Leukemia*	4.3	4.9	—	IBIS, UDOH
Cervical Cancer Incidence	4.1	5.2	8	CHNA.org

Age-adjusted Average per 100,000 Population, 2005–2009 *2003–2007

In the Utah Cancer Control Program Small Area Report 2011¹², the Woods Cross/North Salt Lake area was found to have higher incidence of colorectal cancer, Syracuse/Kaysville area a higher incidence of prostate and skin cancer, and Bountiful area a higher incidence of skin cancer than the state average.

In the 2012 Key Informant Survey cancer was identified as the second most important health priority for adults and second most important disease overall.

Davis County has high prostate cancer incidence compared to the state and nation. Currently there is not a good explanation for the high rate.

Table 16: Prostate Cancer Incidence

Source: CHNA.org

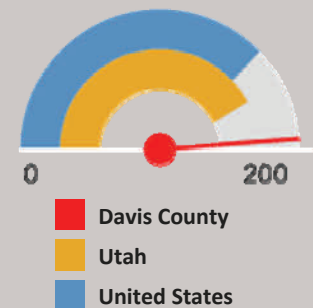
Report Area	Total Population, ACS 2005–2009	Average Annual Cases, 2005–2009	Annual Incidence (per 100,000 Pop.)
Davis County	286,502	560	195.40
Utah	2,651,816	4,502	169.80
United States	301,461,536	456,412	151.40

Prostate Cancer Incidence

Prostate cancer incidence is an indicator where Davis County compares poorly with Utah & the U.S.

Graph 15: Prostate Cancer Incidence Comparison Scale

Annual Incidence Rate (per 100,000 Pop.)



Source: CHNA.org

Currently there is not a good explanation for high prostate cancer incidence.

Adult Obesity

Obesity rates have been rising over the last decade and obesity is one of the leading causes of preventable death in the U.S. Obesity is often the result of an energy imbalance due to poor diet and limited physical activity and it increases the risk for health conditions such as coronary heart disease, type 2 diabetes, cancer, hypertension, dyslipidemia, stroke, liver and gallbladder disease, sleep apnea and respiratory problems, osteoarthritis, and poor health status.

Obesity in adults is defined as a Body Mass Index (BMI) of 30 or more. Overweight is defined as a BMI of 25 or more. BMI is calculated by dividing weight in kilograms by the square of height in meters.

Table 17: Adult Obesity & Overweight Indicators

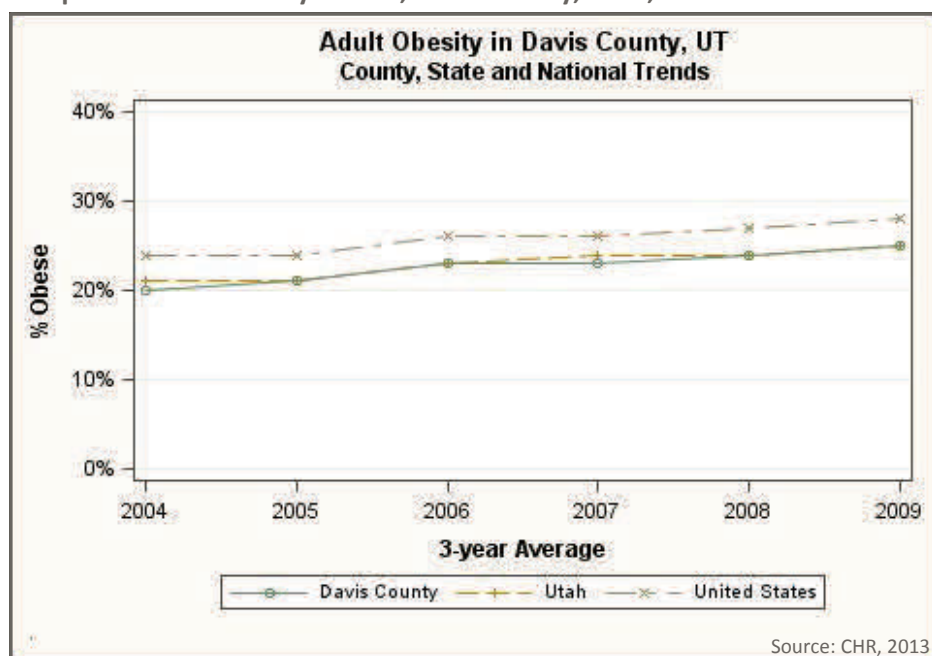
Adult Obesity & Overweight Prevalence	Davis	Utah	U.S.	Source
Obesity, 18+ (2009–2011)	24.9%	25.1%	27.4%	DCCS, UDOH
Obese or Overweight, 18+ (2011)	63.1%	60.3%	62.9%	IBIS, UDOH

Age-adjusted Average per 100,000 Population

Nearly 25% of adults in Davis County are obese. When adults who are obese are combined with adults who are overweight, more than 63% of adults in Davis County are at an unhealthy weight. The Farmington/Centerville small area has the highest percent of adults overweight or obese and is above the state average.

Davis County is meeting the Healthy People 2020 target for adult obesity, and according to the CHR, the county rate is in the top 10% (best) in the nation. However, obesity rates across the nation are too high and 25% is far too many residents who are at risk for serious and costly health conditions.

Graph 16: Adult Obesity Trends, Davis County, Utah, U.S.



Adult Obesity

25% of adults are obese in Davis County.

Davis County compares well in this category by meeting the Healthy People 2020 target & measures in the top 10% (best) of all counties in the U.S.

However, 25% is far too many adult residents who are at risk for serious & costly health conditions.

Childhood Obesity

DCHD is working to gather data sources from across the life span to learn more about obesity trends in our community. Obesity and overweight in children are defined differently than adults. Childhood measures are based on growth charts and take gender as well as age into account.

Childhood Body Weight Terminology:	
Body Mass Index (BMI) is a standardized measurement based on height and weight that is used to estimate the amount of body fat for an individual. BMI is based on the CDC 2000 Growth Charts.	
Classification of Unhealthy Weight (Barlow 2007)	
Overweight	BMI ≥ 85th and <95th percentile for age & gender
Obese	BMI ≥ 95th percentile for age & gender

Table 18: Childhood Obesity & Overweight Indicators

Obesity & Overweight Prevalence	Davis	Utah	U.S	Source
Adolescent Obesity (2011)	5.1%	7.5%	13.0%	DCCS, UDOH
Childhood Overweight & Obesity, Ages 10-17 (2012)	—	22.1%	31.3%	NSCH
Grade School Obesity, Ages 6-11 (2012)	—	9.4%	18%–21.2%	PANO, UDOH
Childhood Obesity, WIC Clients, Age 5 & Under (2010)	6.1%	7.8%	14.0%	DCHD

Age-adjusted Average per 100,000 Population

A statewide surveillance system is in place to estimate the prevalence of obesity in adolescents. Approximately 5% of students grades 8–12 are obese. Davis County is doing well in this measure compared to other counties in the state. In the 2012 National Survey of Children’s Health (NSCH), Utah is the state with the lowest rate of overweight and obesity in young people ages 10–17 at 22.1% compared to the national rate of 31.3%.¹³

Davis County has also participated in a statewide height/weight assessment project for elementary school students. First, third, and fifth grade students from 9 randomly selected public elementary schools throughout the county were weighed and measured to assess the extent of childhood overweight and obesity. A total of 2,048 children were assessed in 2006, 2008, 2010, and 2012. According to the Physical Activity, Nutrition and Obesity Program (PANO) at UDOH, the Davis County sample wasn’t large enough to be statistically representative of all public elementary schools in the county, and an estimate for overweight and obesity prevalence in Davis County grade school students is not available at this time. Statewide results are on page 36.

Some additional obesity prevalence data is available through the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) for children ages 5 and under who are WIC clients. About 6% of Davis County’s WIC children are obese. They are half as likely to be obese as WIC children nationwide.

Childhood Obesity

Utah is the state with the lowest prevalence of overweight & obesity in young people ages 10–17 at 22.1%.

Over 2,000 Davis School District elementary students have participated in a height/weight assessment project.

Obesity Disparities

Elementary School Students in Utah

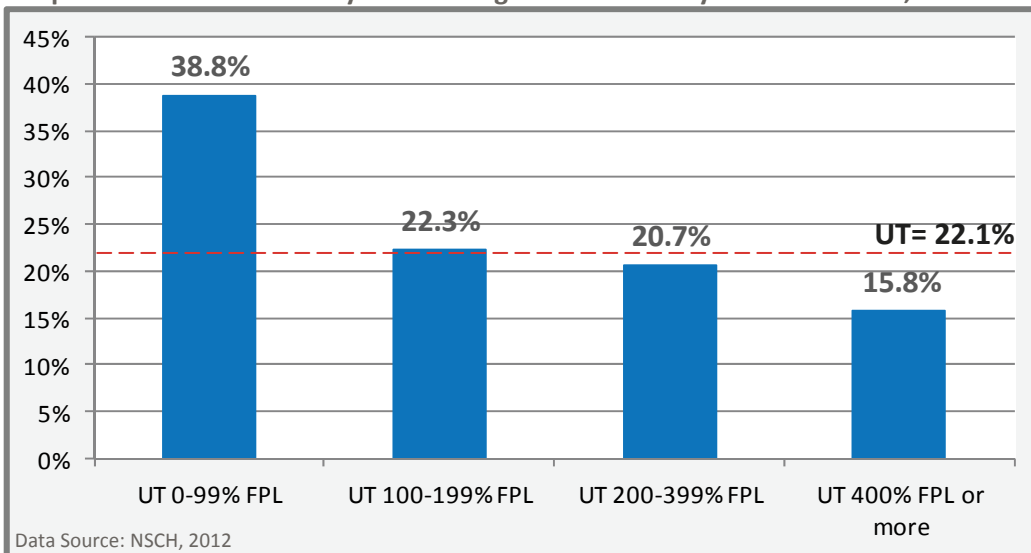
A recent report on the extent of childhood overweight and obesity in Utah assessed through the elementary height/weight project found that:¹⁴

- More boys than girls were overweight or obese in every grade.
- The percentage of boys at an unhealthy weight increased dramatically from grade 1 to 5.
- In 2012, 20.8% of elementary school students were at an unhealthy weight.
- In 2012, 9.4% of elementary school students were obese.
- In 1994, 16.9% of 3rd graders were at an unhealthy weight. By 2012, the rate had increased to 21.3%.
- There was no evidence the rate of overweight or obesity among elementary school students increased between 2010 and 2012.

National Survey of Children’s Health

In the National Survey of Children’s Health, 2011–12, Utah is the state with the greatest variation of overweight/obesity rates in young people ages 10–17 when broken out by household income level. The percent of children with an unhealthy weight ranges from a high of 38.8% in children just below the federal poverty level (FPL) to 15.8% in children more than 400% below the FPL.

Graph 17: Childhood Obesity & Overweight Prevalence by Income in Utah, 2011–12



Obesity

Obesity & healthy weight were identified as top priorities for children, teens & adults in the 2012 Key Informant Survey.

“There are so many health risks linked to obesity that it seems if we address that one, many others may be addressed as well.”

~Davis County Resident

Communicable Disease Incidence

DCHD received a total of 1,732 disease reports during 2012, a 27% increase from the 1,369 disease reports received in 2011. This increase was primarily caused by elevated Sexually Transmitted Disease (STD) reports (chlamydia and gonorrhea) and a pertussis outbreak.

Table 19: Communicable Disease Rates

Communicable Diseases 2011	Rate per 100,000 Population		
	Davis	Utah	U.S.
Sexually Transmitted Diseases			
Chlamydia	237.0	251.3	457.1
Gonorrhea	5.8	9.8	104.1
Syphilis (All Stages)	3.5	2.4	14.9
HIV/AIDS Incidence	1.3	3.3	16.3*
HIV Prevalence	53.9	92.8	271.0
Vaccine Preventable Diseases			
Pertussis (2012 Data)	44.0	54.8	13.4
Hospitalized Influenza	13.8	17.4	—
Enteric Diseases			
Campylobacteriosis	10.6	14.4	—
Cryptosporidiosis	6.1	2.3	3.0
Giardiasis	7.4	9.2	5.5
Shiga Toxin-Producing E. Coli Infection	3.9**	6.3	2.0
Salmonellosis	12.5	12.0	16.8
Other			
Hepatitis C (Acute & Chronic)	48.1	40.2	—
Tuberculosis (Active Disease)	0.3	1.2	3.4
West Nile Virus	0.3	0.1	0.2
Rabies - Animal	0.0	0.3	1.4

Source: DCHD & UDOH *2010 ** Not meeting HP2020 target 0.6

The top 4 diseases reported in Davis County in 2012 were chlamydia, hepatitis C, pertussis, and latent TB (see the top 20 in **Appendix 8**). STDs made up over half of reported diseases (53.9%), followed by vaccine preventable diseases (VPDs) 13.9%, other diseases 12.1%, enteric diseases 9.3%, invasive diseases 5.6%, tuberculosis infections (TB) 4.7%, and vectorborne/zoonotic diseases (VBD) <1%.

While all diseases impact the population in terms of lost productivity and medical costs, the diseases that were most likely to result in hospitalization or death were invasive bacterial infections and vaccine preventable diseases (influenza and pertussis).

Hepatitis C was the second most commonly reported disease in Davis County in 2012 with reports of 196 cases. This represented a 31% increase from 2011 (150 cases), which may be due in part to increased screening among high-risk populations.

Communicable Diseases

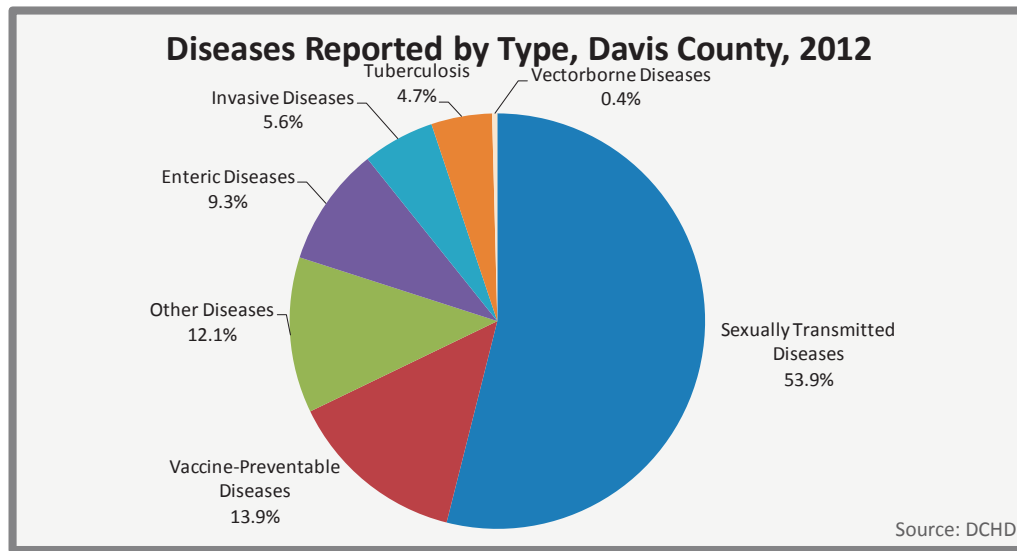
The top 4 diseases reported in Davis County in 2012 were chlamydia, hepatitis C, pertussis, & latent TB.

The top 4 infectious diseases of concern identified by Davis County residents in the 2012 Key Informant Survey were influenza, pertussis, West Nile virus & STDs.

Sexually Transmitted Diseases

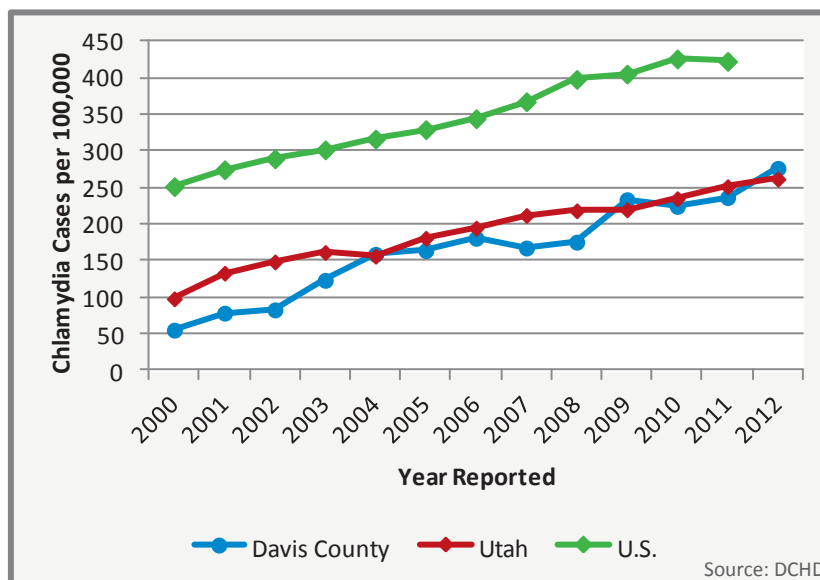
In 2012, Davis County saw a significant increase in STDs (referred to as Sexually Transmitted Infections in the CHR), which accounted for 53.9% of all reported diseases. Similar increases also occurred throughout Utah and the U.S. Between 2011 and 2012, chlamydia cases increased 17% and gonorrhea cases increased 122%. Part of this increase can be tied to enhanced screening of high-risk individuals. Overall, in 2012, rates of STDs were significantly lower than the U.S.

Graph 18: Diseases Reported by Type



Chlamydia is the most common STD reported in Davis County, making up over 90% of total cases. In Davis County, young people aged 18–24 have the highest rates of chlamydia infection. The STD rates in some Davis County cities are heavily impacted by special populations within those cities, including HAFB (military population), Clearfield (Clearfield Job Corps Center), Farmington (Davis County Jail), and South Weber (Weber Basin Job Corps Center).

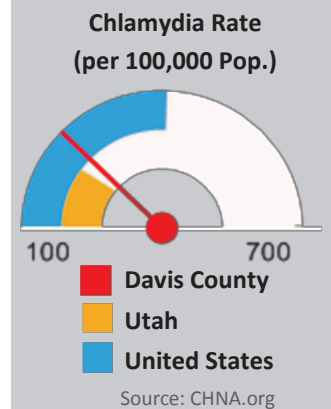
Graph 20: Incidence of Chlamydia, Davis County, Utah, U.S., 2000–2012



Chlamydia

Chlamydia is by far the most common reportable disease in Davis County. Rates in 2012 were above the state average.

Graph 19: Chlamydia Comparison Scale, 2012

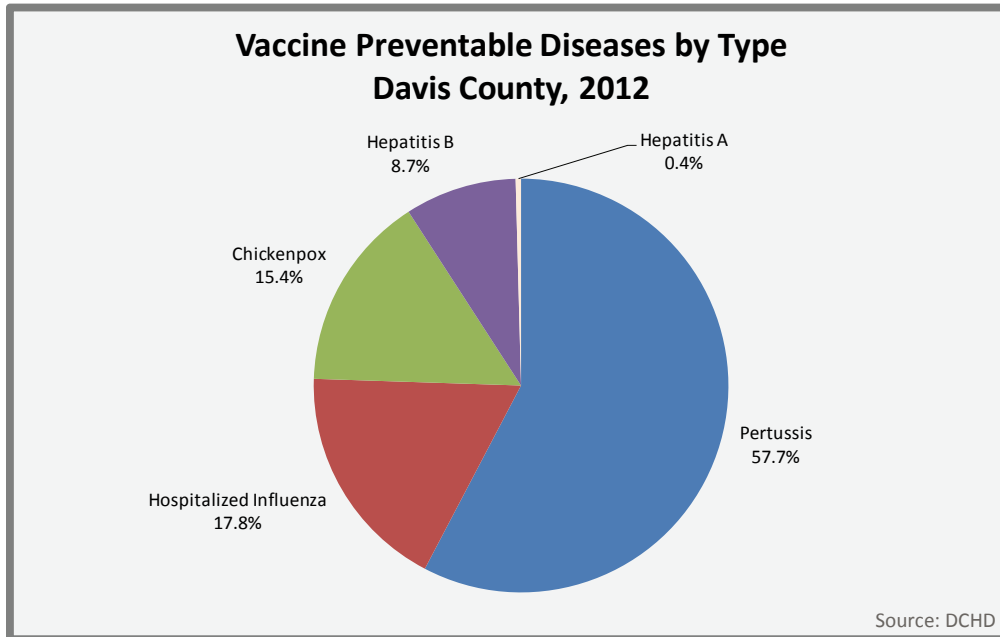


STDs were identified as a priority health concern for teens & young adults in the 2012 Key Informant Survey.

Vaccine Preventable Diseases

Vaccine Preventable Diseases (VPDs) are infectious diseases that have a vaccine available that may prevent disease. Immunizations are the most effective step in protecting the community against VPDs. However, these diseases still occur because of importation, vaccine failure or breakthrough, and incomplete or no vaccinations.

Graph 21: Vaccine Preventable Diseases, 2012



In 2012, Davis County experienced a large outbreak of pertussis. As a result, pertussis was the most commonly reported VPD with 139 cases (58% of all VPDs). Hospitalized influenza was the next most common disease in this category with 43 cases (18%), followed by chickenpox with 37 cases (15%), and hepatitis B with 21 cases (9%).

Pertussis is of particular concern in infants because of high rates of hospitalization, pneumonia, and death compared with older children and adults. The disease also results in disruption in school attendance for cases and their contacts. Children diagnosed with pertussis cannot return to school until they have finished 5 days of appropriate antibiotics or until 21 days following the onset of symptoms (infectious period). When outbreaks occur in schools, unvaccinated children may be excluded for an extended period of time.

DCHD investigates on average about 25 pertussis cases each year. In 2012, 139 cases were reported. This is a 456% increase compared to the 25 cases reported in 2011. This elevated trend was noted across the state and nationally.

Vaccine Preventable Diseases

In 2012 Davis County experienced a large outbreak of pertussis.

Concerns about vaccine preventable diseases & an under-immunized population were identified as themes in the 2012 Key Informant Survey.

Mental Health Conditions

Incidence and prevalence rates for many mental health conditions are not readily available. The table below provides some estimates for the population.

Table 20: Prevalence of Mental Health Conditions

Mental Health Condition Prevalence	Davis	Utah	U.S.	Source
Depressive Disorder, Doctor Diagnosed*	21.2%	21.9%	16.7%	BRFSS, UDOH
Depressive Symptoms, Adolescents	34.3%	34.6%	—	PNAS
Autism, Age 8 per 1,000	—	21.2	11.3	MMWR, CDC
Children with Emotional, Behavioral, or Developmental Conditions, Ages 2–17	—	8.7%	11.3%	NSCH
Confusion/Memory Loss (Age 60+)	16.8%	16.7%	12.7%	BRFSS, UDOH

*Age-adjusted, rates for 2011, except Autism, 2008

Depression

Depression has been identified by the community as the leading mental health concern. The data shows depressive disorders are high in Davis County, Utah, compared to the U.S. and 34.3% of adolescents experience depressive symptoms. Major depression by small area varies between 2.5–6.8%.

Autism

Current and accurate Autism Spectrum Disorder (ASD) prevalence rates are difficult to estimate because of differences in surveillance methods, definitions of diagnosis, and missing records. Prevalence rates of ASD have risen significantly in Utah and the U.S. Reasons for increases in rates of ASD are unknown but are likely to include multiple factors. Utah rates are some of the highest in the nation. Utah estimates from 2008 show 1 out of every 47 8-year-olds has ASD. Rates also differ from the rest of the country because a higher proportion of ASD children in Utah have an IQ>70.¹⁵ Utah boys are nearly 4 times more likely than girls to have ASD.¹⁶ Up-to-date ASD rates for Davis County are scheduled to be released in 2014.

Davis Behavioral Health (DBH) Clients

DBH is the local substance abuse and mental health agency in Davis County. The most common mental health client diagnosis information is below.

Table 22: Mental Health Diagnosis, Davis Behavioral Health Clients, 2012

Mental Health Diagnosis: Davis Behavioral Health Clients					
Diagnosis	Adults Served		Diagnosis	Teens Served	
Anxiety	1,332	26.8%	Attention Deficit	647	18.7%
Mood Disorder	1,288	26.0%	Anxiety	606	17.6%
Depression	580	11.7%	Mood Disorder	462	13.4%
Substance Abuse	441	8.9%	Neglect & Abuse	374	10.8%

Source: Division of Substance Abuse & Mental Health Annual Report, 2012

Mental Health

Mental health incidence & prevalence rates are not readily available.

Depression, anxiety & suicide are the leading mental/emotional health concerns identified by residents in the 2012 Key Informant Survey.

Depression is a leading risk factor for young people in Davis County.

Oral Health Conditions

Dental caries (tooth decay) is one of the most common health problems in the United States. Among school-aged children, 45% have caries in their permanent teeth. Among adults, 94% show evidence of past or current dental caries. Untreated dental caries is an important indicator of adequate and timely access to dental care.

Table 23: Oral Health Conditions

Oral Health Conditions	Davis	Utah	U.S.	Source
Poor Dental Health (2006-2010)	6.2%	8.6%	15.6%	CHNA.org
Prevalence of Dental Caries/Cavities Ages 6-9 (2010)	—	51.7%*	—	OHP, UDOH
Untreated Decay Ages 6-9 (2010)	—	17.0%	—	OHP, UDOH

*Not meeting HP2020 Target of 49%.

Just over 6% of Davis County residents report poor dental health which is the percentage of adults age 18 and older who self-report that 6 or more of their permanent teeth have been removed due to tooth decay, gum disease, or infection. Davis county is doing better in this measure than the state and nation.

In order to assess the oral health status of Utah school-aged children (6-9 years), the UDOH Oral Health Program (OHP) conducted a statewide oral health survey in fall 2010. The survey collected information on caries experience, untreated decay, need for urgent dental care, sealants, and access to care (e.g., insurance status, frequency of dental visits, and unmet dental needs). The survey consisted of 2 separate data collection methods: a parent questionnaire and a dental screening.

More than 3,000 Utah children in first, second, and third grades received a dental screening. Two schools from the Davis School District participated. The sample size wasn't big enough to make reliable estimates of rates in Davis County.

Key findings from the report include:

- Overall, among 6-9 year-old children who received dental screening, more than half (52%) had caries experience. Utah is close to meeting the HP2020 target of 49%.
- Close to one-fifth (17%) of children had untreated dental decay.
- Only about a quarter (26%) of children had sealants present on at least 1 permanent molar tooth.
- Of all children screened, 2% had a need for urgent dental care.
- Children from low-income families have about double the number of dental caries compared to their counterparts with higher incomes. They are less likely to get care and more likely to have severe dental decay.
- Children who met the criteria of long-term optimal levels of fluoride, either from fluoridated water or fluoride supplements, had substantially fewer decayed, missing, and filled tooth surfaces compared to children without optimal fluoride levels.

Oral Health

Davis County residents report better dental health compared to the state & U.S.

Utah is not meeting the Healthy People 2020 objective for dental caries in children ages 6-9.

Children from low-income families have double the number of dental caries.

Health Factors

Health factors in the CHR represent what influences the health of a county. Four types of health factors are measured: health behaviors, clinical care, social/economic, and physical environment factors. Each of these factors is based on several measures in this assessment.

Davis County strengths are in indicators measuring clinical care (2nd) and social/economic factors (4th). Health behaviors rank 5th. The lowest ranking is 13th for physical environment.

A fifth set of factors that influence health, genetics and biology, is not included in the CHR. Some biological and genetic factors affect specific populations more than others. Examples of biological and genetic determinants of health include:

- Inherited conditions, such as sickle-cell anemia, hemophilia, and cystic fibrosis
- Carrying the BRCA1 or BRCA2 gene, which increases risk for breast and ovarian cancer
- Family history of heart disease

Table 24: County Health Rankings, Health Factors Utah Summary

Rank	Health Factors
1	Summit
2	Morgan
3	Cache
4	Davis
5	Utah
6	Wasatch
7	Box Elder
8	Washington
9	Kane
10	Salt Lake
11	Carbon
12	Iron
13	Wayne
14	Sevier
15	Weber
16	Emery
17	Millard
18	Tooele
19	Juab
20	Garfield
21	Sanpete
22	Beaver
23	Duchesne
24	Uintah
25	Grand
26	Piute
27	San Juan

Not ranked: Daggett, Rich

Health Factors

Health factors represent what influences the health of a county.

County Health Rankings measure 4 types of factors: health behaviors, clinical care, social/economic, & physical environment.

Davis County ranks 4th for health factors.

County strengths are clinical care & social/economic factors.

Health Behaviors

Many health outcomes are directly linked to certain health behaviors and risk factors. Practicing healthy behaviors, like exercising, or refraining from unhealthy behaviors, like smoking, can reduce an individual’s risk for many chronic conditions and adverse health outcomes. In addition to practicing healthy behaviors, monitoring and addressing certain risk factors, like blood pressure, can greatly reduce the risk for a negative health outcome. One health behavior can have a large effect on individual risk. Health behavior indicators in this section include tobacco, alcohol, and drug use; physical activity; healthy eating; safety; and preventive care.

Much more information about youth substance abuse in Davis County is available in the 2011 Prevention Needs Assessment Survey (PNAS) Results. The report also includes risk and protective factor indicators, which measure specific aspects of a youth’s life experience that predict whether he/she will engage in problem behaviors. Layton and Bountiful Communities that Care (CTC) risk and protective factor reports are also useful for understanding alcohol and drug use and related factors in those cities.

Obesity, motor vehicle crash deaths, sexually transmitted diseases/infections, and teen birth rates are indicators that are included in the health behaviors section of the CHR as proxy measures of behavior. In this assessment those indicators were covered previously in the health outcomes section (pages 23–41).



Health Behaviors

County Health Rankings measure health behaviors through indicators for tobacco use, alcohol use, sexual activity & diet/exercise.

Davis County ranks 5th in the state for health behaviors. (See page 22, CHR model with health factor section ranks.)

Tobacco, Alcohol & Drug Use

Davis County tobacco and alcohol use rates are some of the lowest in the country. According to the Tobacco Prevention and Control Program (TPCP) 2012 Annual Report, the adult smoking rate in Davis County is 9.5%. This rate should not be compared with prior years because of a change in BRFSS methodology to include cell phones. Clearfield/HAFB small area has a higher adult smoking rate than the state average at 12.2%. Smoking rates are highest in low-income populations. The 2011 youth smoking rate is 4.4%.

Table 25: Tobacco, Alcohol & Marijuana Indicators

Tobacco, Alcohol & Drug Use	Davis	Utah	U.S.	Source
Adult Smoking (2011)	9.5%	11.3%	20.4%	TPCP, UDOH
Youth Smoking, Grades 9-12 (2011)	4.4%	5.2%	18.1%	TPCP, UDOH
Pregnant Women Smoking (2010)	4.1%	6.0%	13.0%	TPCP, UDOH
Illegal Sales of Tobacco to Underage Buyers (FY 2012)	4.0%	5.0%	8.5%	TPCP, UDOH
Binge Drinking, Adults (2011)	9.0%	11.2%	18.3%	DCCS, UDOH
Youth Alcohol Use, Grades 8, 10, 12 (2011)	10.3%	11.2%	38.7%	DCCS, UDOH
Illegal Sales of Alcohol to Underage Buyers (FY 2011)	8.2%	7.7%	—	EASY, UHSO
Youth Marijuana Use, Grades 8, 10, 12 (2011)	5.8%	7.0%	23.1%	DCCS, UDOH

Of adults in Davis County, 9% binge drink, which is defined as consuming 5 or more drinks of alcohol on an occasion one or more times during the past 30 days. In grades 8, 10, and 12, 10.3% of students use alcohol compared to 38.7% nationally.

During tobacco compliance checks, 4% of underage buyers were able to purchase tobacco from retailers in Davis County. During alcohol compliance checks, 8.2% of underage buyers were able to purchase alcohol.

Youth marijuana use is also low at 5.8% compared to 23.1% nationally. Drug use varies by age. Inhalants are the most used substance for those in grade 6.

Drug use and abuse was identified as the leading health concern for teens and young adults in the 2012 Key Informant Survey. Prescription drug abuse was also mentioned repeatedly in the survey. Abuse of energy drinks was mentioned several times although no indicators were available to include documenting this concern.

2012 Primary Substance of Abuse at Admission Davis Behavioral Health Clients		
Substance	# of Clients	% of Clients
Methamphetamine	247	29%
Marijuana/Hashish	192	23%
Alcohol	182	21%
Heroin	106	13%

Table 26: Substance Abuse, Davis Behavioral Health (DBH) Clients

DBH clients are most likely to use methamphetamines, followed by marijuana and then alcohol.

Tobacco & Alcohol Use

Davis County tobacco & alcohol use rates are some of the lowest in the country.

Drug use & abuse was identified as the leading health concern for teens & young adults in the 2012 Key Informant Survey.

Abuse of energy drinks was mentioned in the 2012 Key Informant Survey. Current indicators were not available to include in this assessment.

Source: Division of Substance Abuse & Mental Health Annual Report, 2012

Youth Alcohol Use

When it comes to alcohol use, Davis County youth drink alcohol at a much lower rate than the national average. However, alcohol is still the most common substance used by young people in Davis County identified in the 2011 Prevention Needs Assessment Survey (PNAS). Of students surveyed, 7.8% had alcoholic beverages in the last 30 days and 6% reported binge drinking. The table below shows variation in rates by grade.

Table 27: Youth Alcohol Use Indicators

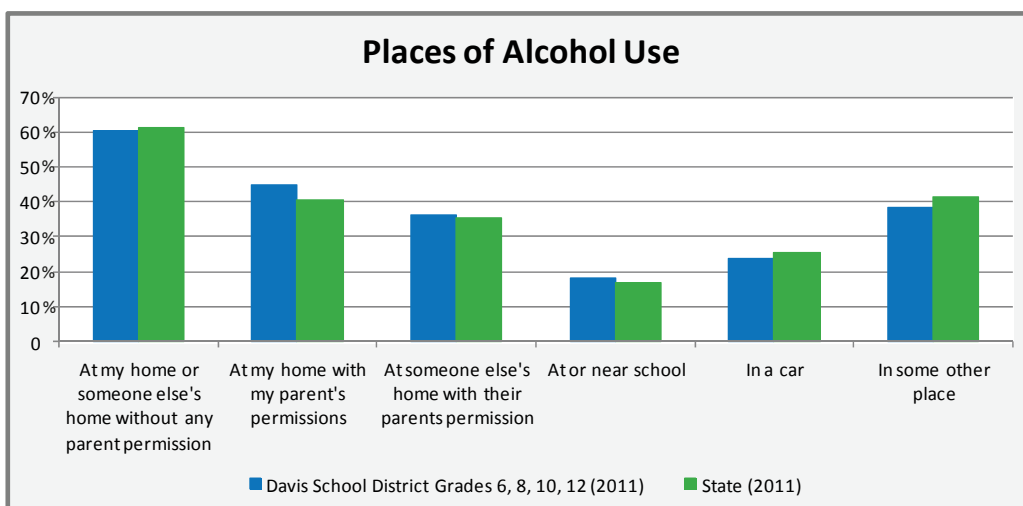
Youth Alcohol Use in Davis County by Grade	6th	8th	10th	12th
Alcohol Use (Had Alcoholic Beverage in the Past 30 Days)	1.0%	5.4%	9.2%	17.5%
Binge Drinking (5+ Drinks in a Row in the Past 2 Weeks)	1.0%	4.6%	6.9%	13.0%

Source: Prevention Needs Assessment Survey, 2011

While a smaller portion of Utah’s youth drink alcohol compared to the nation, survey data suggests Utah youth who do drink alcohol are more likely to engage in binge drinking compared to their national counterparts. In addition, 6.8% of students reported they have been drunk or high at school and the same percentage of students reported riding in a car with a driver who had been drinking. Experimentation with alcohol almost doubles between grades 6 and 8.

While most Davis County youth do not consume alcohol, for those who do the most common place is their home or someone else’s home, usually without permission. However, surprisingly, of those who consume alcohol, 44.7% drink at home with parents’ permission and 36.1% drink at someone else’s home with their parents’ permission.

Graph 22: Places of Alcohol Use (Prevention Needs Assessment Survey Question Only for Students Who Reported Drinking Alcohol. Did you drink alcohol in any of the following places?)



Youth Alcohol Use

Alcohol is the most common substance used by young people.

In 2011, 6% of students in Davis County report binge drinking, which means they had 5 or more drinks in a row in the past 2 weeks.

While most Davis County youth do not consume alcohol, for those who do, the most common place is their home or someone else’s home.

Healthy Eating

Fruits and vegetables contain essential vitamins, minerals, fiber, and other compounds that may help prevent many chronic diseases. Fruits and vegetables help people to achieve and maintain a healthy weight because they are relatively low in energy density. These indicators are relevant because unhealthy eating habits may be the cause of significant health issues, such as obesity and diabetes.

In Davis County, 34% of adults eat 2 or more servings of fruit per day and only 16.8% eat 3 or more servings of vegetables per day. These rates are just above the state and national averages.

Table 28: Healthy Eating Behavior Indicators

Healthy Eating	Davis	Utah	U.S.	Source
Fruit Consumption, 2 or More Servings (2011)	34.0%	33.8%	30.7%	IBIS, UDOH
Veggie Consumption, 3 or More Servings (2011)	16.8%	16.6%	15.3%	IBIS, UDOH
Breastfeeding, Children 0-5 Who Were Ever Breastfed (2011-12)	—	88.9%	79.2%	NSCH
Breastfeeding, WIC Children 0-5 Who Were Ever Breastfed (2010)	71.5%	77.7%	61.7%	WIC, DCHD

2010 Dietary Guidelines for Americans recommend making half your plate fruits and vegetables. When it comes to fruits and veggies, more matters. For individualized fruit and vegetable consumption recommendations visit, choosemyplate.gov, where specific recommendations for age, gender, and activity level are available.

Utah is in the top 5 for states with children who were ever breastfed, with 89% of children represented. In the Davis County WIC program, 71.5% of children under 5 were breastfed at some point. Health professionals agree that human milk provides the most complete form of nutrition for infants, including premature and sick newborns. There are only rare exceptions when this isn't the case. Suboptimal breastfeeding practices are associated with a greater risk of infant morbidity and mortality and poorer developmental outcomes. Increasing breastfeeding rates can decrease infant death and illness worldwide.

Healthy Eating

In 2011, 34% of adults in Davis County eat 2 or more fruit servings each day & only 16.8% eat 3 or more vegetable servings each day.

Nutrition is the 2nd highest children's health concern identified in the 2012 Key Informant Survey.

2010 Dietary Guidelines for Americans recommend making half your plate fruits & vegetables.

Physical Activity

Physical activity has been shown to reduce the risk of chronic diseases and improve general physical and mental health. Weight-bearing activity can improve bone density, reducing the risk of hip fractures in elderly persons. Regular activity helps to relieve pain from osteoarthritis. Regular physical activity is also known to improve affective disorders such as depression and anxiety, and increase quality of life and independent living among the elderly.

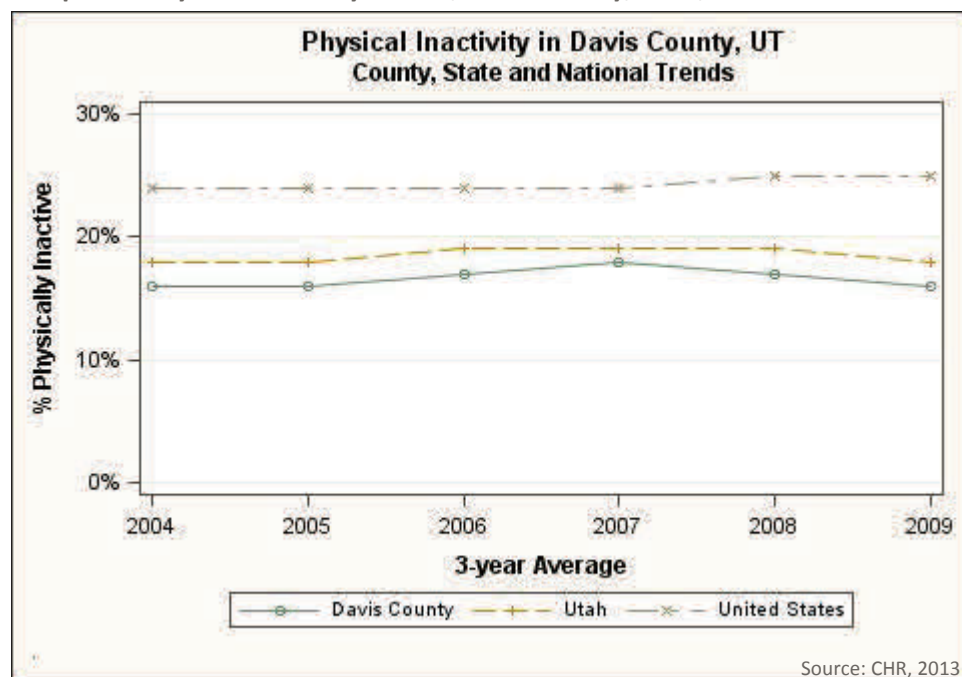
Table 29: Physical Activity Indicators

Physical Activity	Davis	Utah	U.S.	Source
Recommended Physical Activity Adults (2011)	57.7%	56.1%	51.4%	DCCS, UDOH
Recommended Physical Activity High Schoolers (2005–2011)	47.2%	48.9%	—	DCCS, UDOH
Physical Inactivity, Ages 20+ (2009)	16.0%	18.0%	25.0%	CHR
Activity Limitation, Ages 18+ (2010–2011)	21.6%	24.3%	23%	IBIS, UDOH

In 2011, 57.7% of adults and 47.2% of high school students in Davis County reported getting the recommended amount of physical activity.

An estimated 16% of adults ages 20 and over in Davis County report no leisure time physical activity. Decreased physical activity has been related to disease conditions such as type 2 diabetes, cancer, stroke, hypertension, cardiovascular disease, and premature mortality, independent of obesity.

Graph 23: Physical Inactivity Trends, Davis County, Utah, U.S.



Physical Activity

Davis County is meeting the Healthy People 2020 objective of recommended physical activity in adults, which is 47.9% who get 150+ minutes per week of moderate-intensity activity, or 75 minutes of vigorous-intensity activity, or an equivalent combination.

Physical activity has been shown to reduce the risk of many chronic diseases & improve general physical & mental health.

Safety

There are safety measures residents can take to prevent serious injury, disease, and death. Safe practices are things everyone can do to ensure unintentional injuries don't turn into more disabling injuries and deaths.

Table 30: Safety Indicators

Safety	Davis	Utah	U.S.	Source
Always Wear Seatbelt, Adults (2011)	84.1%*	82.2%	86.6%	BRFSS, UDOH
Bicycle Helmet Use, All Ages (2008)	—	36.5%	20-25%	VIPP, UDOH
Sun Safety Practice, Adults (2006, 2008, 2010)	64.1%**	65.4%	—	DCCS, UDOH
Homes with No Smoking Rule (2012)	94.4%	93.2%	—	TPCP, UDOH
# of DUI Arrests (2011)	1,374	13,816	—	UDPS

*Not meeting Healthy People 2020 Target of 92%. **Not meeting Healthy People 2020 Target of 80.1%.

Seatbelt Use & Safety Restraints

In Davis County, 84.1% of adults report they always wear their seatbelt. This is lower than the national average of 86.6%. Yearly high school seatbelt observation surveys provide the best estimate for teenage seatbelt use in Davis County, which was 83.2% in 2011–2012. Seatbelts are the single most effective safety device for preventing serious injuries and reducing fatalities in motor vehicle crashes. In Utah, unbelted crash occupants were 32 times more likely to die in a crash than crash occupants wearing seatbelts.¹⁷

Observation surveys in 2008 estimated 93% of children ages 0–4 and 88% of children ages 5–10 were using a child safety restraint. During car seat fitting stations/check points in the county, approximately 95% of car seats were found to be incorrectly installed by caregivers.¹⁸

Bicycle Helmets

Bicycle helmet use across all ages is estimated to be 36.5% in Utah. Davis County estimates are not available.

Sun Safety

In Davis County, 64.1% of adults reported practicing sun safety, defined as doing at least one thing to protect yourself from the sun: wearing sunblock, wearing a hat, avoiding the sun, or wearing a long-sleeve shirt. It is estimated that 90% of non-melanoma skin cancers and 65% of melanoma skin cancers are associated with exposure to ultraviolet (UV) radiation from the sun.

Home Smoking Rules

Of homes in Davis County, 94.4% have a no smoking rule. An estimated 1% of children in Davis County are exposed to secondhand smoke in their homes.

DUI Arrests

In 2011, there were 1,374 DUI arrests in Davis County, representing 9.94% of total DUI arrests in Utah. Alcohol-impaired driver crashes were 5.4 times more likely to be fatal than other crashes.

Safety

Davis County is not meeting the Healthy People 2020 target for sun safety.

Very few children in Davis County are exposed to secondhand smoke in their homes.

Other safety behaviors of interest include unsafe sex/condom use & emergency preparedness. There is not county or state level data available for these indicators.

Preventive Care

Clinical preventive services are important for maintaining good health. Engaging in preventive behaviors decreases the likelihood of developing future health problems. Behaviors included are routine medical and dental checkups, prenatal care, high blood pressure management, and immunization exemptions.

Physician counseling can influence health behaviors and prevent disease entirely in many cases. In 2011 the percentage of individuals who reported having a routine checkup in the past year in Davis County was 59.6%, below the national average of 66.9%.

In 2010, 73.7% of adults reported a dental visit in the past year, which is higher than the national average of 67.9%. Regular dental visits are important in the prevention, early detection, and treatment of oral and craniofacial diseases and conditions for all ages. Infrequent use of dental services has been associated with poor oral health among adults.

In Davis County, 78.8% of pregnant women seek prenatal care early, which is better than the state and nation. Prenatal care is an important part of a healthy pregnancy. Women who receive early and consistent prenatal care enhance their likelihood of giving birth to a healthy child. Prenatal care can improve birth outcomes and prevent medical complications and their costs associated with premature births, low birth weight births, and maternal and infant mortality and morbidity.

Table 31: Preventive Care Indicators

Preventive Care	Davis	Utah	U.S.	Source
Routine Medical Check Up in the Past 12 Months* (2011)	59.6%	57.2%	66.9%	DCCS, UDOH
Routine Dental Visit in the Past Year* (2010)	73.7%	68.7%	67.9%	DCCS, UDOH
Prenatal Care in the First Trimester of Pregnancy (2009–2011)	79.0%	73.1%	71%**	IBIS, UDOH
High Blood Pressure Management (2006–2010)	31.6%	30.6%	21.7%	CHNA.org
Immunization Exemptions at Kindergarten Entry (2011)	3.0%	3.6%	—	IP, UDOH
Immunization Exemptions at 7th Grade Entry (2011)	3.1%	4.0%	—	IP, UDOH

*Age-adjusted Percentage of Adults. **2008 Estimate.

In Davis County, 31.6% of adults are not taking medication for their high blood pressure compared to 21.7% nationally.

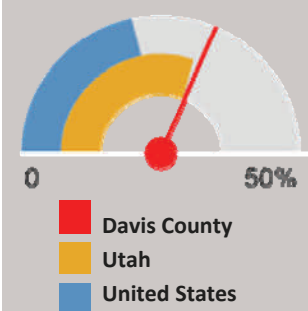
Immunizations are the most cost effective disease prevention measure. A parent may claim an exemption to immunization for medical, religious, or personal reasons, as allowed by Section 53A-11-302 of the Utah Statutory Code. Each exemption claimed must be accompanied by the appropriate UDOH Exemption Form. Within the Davis School District, 3% of students received an immunization exemption for kindergarten entry and 3.1% received an exemption for 7th grade entry during 2011.

Blood Pressure Management

High blood pressure management is an indicator where Davis County compares poorly with the nation.

Graph 24: High Blood Pressure Management Comparison Scale

Percent of Adults Not Taking Medication



Source: CHNA.org

Nearly 32% of adults are not taking blood pressure medication when needed, which is equal to 61,241 adults.

Clinical Care

CHR measure indicators for both access to care and quality of care.

Access to Care

Access to healthcare measures accessibility to needed primary care, healthcare specialists, emergency treatment, mental healthcare, and dental care. While having health insurance is a crucial step toward accessing the different aspects of the healthcare system, health insurance by itself does not ensure access. Whether a person has access is related to having comprehensive coverage, providers that accept the individual's health insurance, relatively close proximity of providers to patients, and primary care providers in the community. There are additional barriers to access in some populations due to lack of transportation, lack of knowledge about preventive care, long waits to get an appointment, low health literacy, and inability to pay high deductibles of many insurance plans and/or co-pays for receiving treatment.

Rates of morbidity, mortality, and emergency hospitalizations can be reduced if community residents access services such as health screenings, routine tests, and vaccinations. Prevention indicators can call attention to a lack of access or knowledge regarding one or more health issues and can inform program interventions.

Quality of Care

A basic way of explaining quality healthcare is the right care, for the right person, at the right time. The Institute of Medicine (IOM) further defines the quality of healthcare as "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge." The IOM lists 6 characteristics of quality healthcare: safe, timely, effective, efficient, equitable, and patient centered.

Local Public Health System Assessment

Additional health service access and quality of population-based health services issues will be explored in a local public health system assessment planned for Davis County in the near future.

Clinical Care

County Health Rankings measure indicators for both access to care & quality of care.

Davis County ranks 2nd in the state for clinical care.

Why is Davis County a healthy place to live? "Good hospital, great doctors, love the urgent care, great access for immunizations."

~Davis County Resident

Insurance

The proportion of Davis County residents without health insurance is lower in Davis County than any other county in Utah. Of those under age 65, 11.3% are without health insurance. This reported rate should not be compared with prior years because of a change in BRFSS methodology to include cell phones. There are several surveys that estimate the population of uninsured. Depending on the survey, Davis County rates range from 6.8%–12%.

Table 32: Insurance Coverage Indicators

Insurance Coverage	Davis	Utah	U.S.	Source
Lack of Health Insurance Coverage, Under Age 65 (2010, Age-adjusted)	11.3%	21.5%	15.1%*	BRFSS, UDOH
Uninsured Adults (2010)	14.0%	20.0%	—	CHR
Uninsured Children (2010)	8.0%	11.0%	—	CHR

*American Community Survey Estimate

Lack of health insurance coverage is a significant barrier to accessing needed healthcare. Employer-based coverage is the largest source of health coverage in the U.S., and many unskilled, low-paying, and part-time jobs do not offer benefits. Uninsured individuals experience more adverse outcomes (physically, mentally, and financially) than insured individuals. Individuals without insurance are less likely to receive preventive and diagnostic healthcare services, are more often diagnosed at a later disease stage, and, on average, receive less treatment for their condition than insured individuals. The IOM reports that the uninsured population has a 25% higher mortality rate than the insured population.

Concern about high cost of healthcare and health insurance was a community theme in the 2012 Key Informant Survey. Other insurance issues that came up include no insurance, underinsured, not being able to afford coverage, employer not offering, high co-pays, waiting lists, restrictions, limited specialists, and only out of county facilities.

In the 2012 Focus Groups and Key Informant Survey, lack of dental coverage was a recurring theme and the fact that Medicaid doesn't cover dental and vision was mentioned repeatedly.

Clinical Care

Davis County leads all counties in the state with the lowest percentage of the population without health insurance coverage.

Concern about the high cost of health insurance was a community theme identified in the 2012 Key Informant Survey.

Cost of Healthcare

In Utah, cost is the most commonly reported barrier to getting needed healthcare.

Table 33: Cost of Care

Cost of Healthcare	Davis	Utah	U.S.	Source
Cost as a Barrier to Care in Past Year (2011, Age-adjusted)	12.0%	16.1%	17.3%	DCCS, UDOH
Price Adjusted Medicare Costs per Enrollee (2010)	\$8,631	\$8,710	—	CHR
Average Hospital Discharge Charges (2011)	\$19,165	\$19,712	\$30,655*	UHCR

*2009 Estimate

Cost as a Barrier to Care

The percent of adults who could not see a doctor in the past 12 months because of cost is 12% in Davis County compared to 16% in Utah and 17% nationally. The Utah measure is the highest and has been since tracking started in 2003. Utah adults with low incomes had a higher rate of reporting cost as a barrier to healthcare than those with higher incomes, as did those without health insurance versus the insured.

Medicare Costs

The price-adjusted Medicare spending (Parts A and B) per enrollee in Davis County is \$8,631. This is slightly below the state average.

Utah Hospital Comparison Report—Hospital Charges

In the 2011 Utah Hospital Comparison Report (UHCR), average hospital charges can be compared in numerous ways including by diagnosis, condition, and procedure. For all discharges combined in Davis County, the average hospital charges are \$19,165. This is just below the state average and significantly lower than the national average. Average hospital charges are influenced by many factors including but not limited to number of discharges, size of hospital, services offered and needed, and length of stay. In Davis County, the average charges at discharge for Davis Hospital and Medical Center were \$13,621 with an average stay of 3 days. At Lakeview Hospital, the average charges at discharge were \$24,708 with an average stay of 4.1 days.

Healthcare costs are an important measure of the efficiency of a healthcare system. However, in order to rank a measure an “ideal” value must be known. Research shows that too little or too much healthcare spending is not good for healthcare outcomes. However, it is not yet known what the “ideal” level of spending on patients should be.

Cost of Care

Cost of healthcare, insurance & income were identified as the top 3 barriers that prevent access to healthcare in Davis County, according to the 2012 Key Informant Survey.

“Dental care is really hard to get for cheap. If you don’t have insurances, then most of the time you don’t get dental care because you can’t afford it.”
~Davis County Resident

Healthcare Provider Ratios

Access to care requires not only financial coverage but also access to providers. While high rates of specialist physicians have been shown to be associated with higher, and perhaps unnecessary utilization, sufficient availability of primary care physicians is essential for preventive and primary care, and, when needed, referrals to appropriate specialty care.

Table 34: Healthcare Provider Ratios

Healthcare Provider Ratios (2011–12)	Davis	Utah
Ratio of Primary Care Physicians per Population*	2,138:1	1,795:1
Ratio of Dentists per Population*	1,673:1	1,572:1
Ratio of Mental Health Providers per Population	6,035:1	2,994:1

Source: CHR, 2013 *Data should not be compared with prior years due to changes in definition.

Primary Care Physicians

The ratio of physicians to persons in a population is an indication of the capacity of the health system and the access to care for persons in the population. In Davis County, there are 2,138 residents for every 1 primary care physician, which is fewer physicians per population than the state ratio of 1,795:1. Primary care physicians include practicing physicians (M.D. and D.O.) under age 75 specializing in general practice medicine, family medicine, internal medicine, and pediatrics.

The optimal ratio of physicians to population depends on many factors, including population density and the health status and healthcare utilization patterns of the population.

Dentists

There are 1,673 residents for every 1 dentist in Davis County, which is fewer dentists per population compared to the state. Untreated dental disease can lead to serious health effects including pain, infection, and tooth loss. Lack of sufficient providers is only one barrier to accessing oral healthcare.

Mental Health Providers

Access to mental health services in a community is an important facet of a well run healthcare system. There are 6,035 residents for every 1 mental health provider in Davis County. This is significantly less than the state ratio of 2,994:1. Mental health professionals include child psychiatrists, psychiatrists, and psychologists active in patient care in a given county. This ratio may not fully represent the number of mental health professionals in Davis County or Utah. There are additional masters level mental health professionals not included in the definition. This mental health provider ratio from the County Health Rankings has not be found to be reliable enough to include as a core measure that factors into each county's ranking but it is provided as an additional measure to consider.

Ratio of Healthcare Providers

When it comes to ratio of healthcare providers per population, Davis County compares poorly to the state & the U.S. with fewer primary care providers, dentists, & mental health professionals.

In the 2012 Key Informant Survey, residents mentioned needing to go to Salt Lake County to find appropriate healthcare providers.

Access to Healthcare Providers

Primary Care Provider Rate

There are 50.9 primary care physicians per 100,000 population in Davis County (2011).

Table 35: Primary Care Provider Rate

Source: CHNA.org

Report Area	Total Population, 2010 Census	Total Primary Care Providers	Primary Care Provider Rate (per 100,000 Pop.)
Davis County	306,479	155	50.90
Utah	2,763,885	1,791	64.80
United States	312,471,327	264,897	84.70

In Utah the physician supply has kept up with growth in the population; however, access is also influenced by the availability of doctors by specialty area and by geographic area. The number of active physicians per civilian population in Utah is lower than the U.S. as a whole. Utah predicts that about 1,100 physicians will retire in the next 10 years, which may cause shortages in provision of care.

Health Professional Shortage Area

This indicator reports the percentage of the population that is living in a geographic area designated as a Health Professional Shortage Area (HPSA), defined as having a shortage of primary medical care, dental, or mental health professionals. In 2011, Davis County had this designation because of a shortage of dental providers in specific low-income census tracts of Clearfield. Midtown Community Health Center Davis County Medical and Dental Clinics are located in Clearfield and offers dental services to this underserved population.

Table 36: Health Professional Shortage Area Indicator

Source: CHNA.org

Report Area	Total Population, 2010 Census	HPSA Designation Population	Underserved Population	Percent of Designated Population Underserved
Davis County	306,479	11,037.96	7,237.98	65.57%
Utah	2,769,922	404,768.71	218,173.82	53.90%
United States	312,676,557	52,826,822.65	32,117,352.05	60.80%

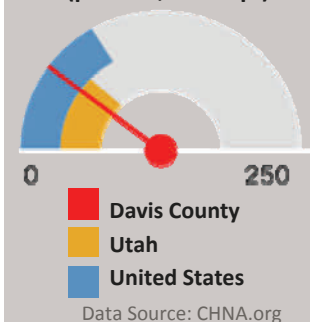
Despite lower ratios/rates of healthcare providers in Davis County, residents believe access to medical care is one of the top reasons Davis County is a healthy place to live according to the 2012 Key Informant Survey. However, waiting lists and lack of specialists were mentioned as barriers to accessing healthcare.

Primary Care Providers

Davis County has a lower rate of primary care providers per population than the state & U.S.

Graph 25: Access to Primary Care Comparison Scale

Primary Care Provider Rate (per 100,000 Pop.)



Despite lower ratios/rates of healthcare providers, residents believe access to medical care is one of the top reasons Davis County is a healthy place to live.

~2012 Key Informant Survey

Mental Health & Substance Abuse Services

The percentage of adults and youth needing mental health treatment by local authority varies considerably. Accessibility based on location, funding, and other factors are issues throughout different areas of the state. Stigma around mental health is another factor why people do not seek services even though a need exists.

The annual report from the Utah Division of Substance Abuse and Mental Health looks at the public mental health system in each local jurisdiction. The data shows the estimated number of adults and youth who need mental health and the actual number who needed substance abuse treatment versus the capacity of the local substance abuse and mental health authority (in this case Davis Behavioral Health) to provide services.

Table 37: Mental Health & Substance Abuse Treatment Needs vs. Capacity

Davis Behavioral Health, Local Substance Abuse & Mental Health Provider Agency	Adults (18+)		Youth (Under Age 18)	
	# Need Treatment	Current Capacity	# Need Treatment	Current Capacity
Mental Health Treatment Needs vs. Clients Served	8,269	2,698	3,984	1,446
Substance Abuse Treatment Needs vs. Treatment Capacity	8,416	842	1,349	89

Source: Division of Substance Abuse & Mental Health Annual Report, 2012

In fiscal year 2012, the estimated number of adults who needed mental health treatment in Davis County was 8,269 and the number who were actually served by Davis Behavioral Health, the county’s contract provider was 2,698. The estimated number of youth who needed mental health treatment was 3,984 and the number served by Davis Behavioral Health was 1,446. Others may have received treatment through private providers.

In fiscal year 2012, the actual number of adults who needed substance abuse treatment in Davis County was 8,416 and the number who were served by the county’s contracted treatment provider was 842. The number of youth who needed substance abuse treatment was 1,349 and the number served was 89. Others may have received treatment through private providers.

Davis Behavioral Health has contracts to provide mental health services to individuals with Medicaid, Medicare, commercial insurance, and unfunded county residents. Some individuals needing mental health and substance abuse treatment find service through private providers. Other mental health service providers in the county include Davis School District and LDS Family Services. Utilization and access statistics for other mental health and substance abuse service providers were not available for this report.

Mental Health Services

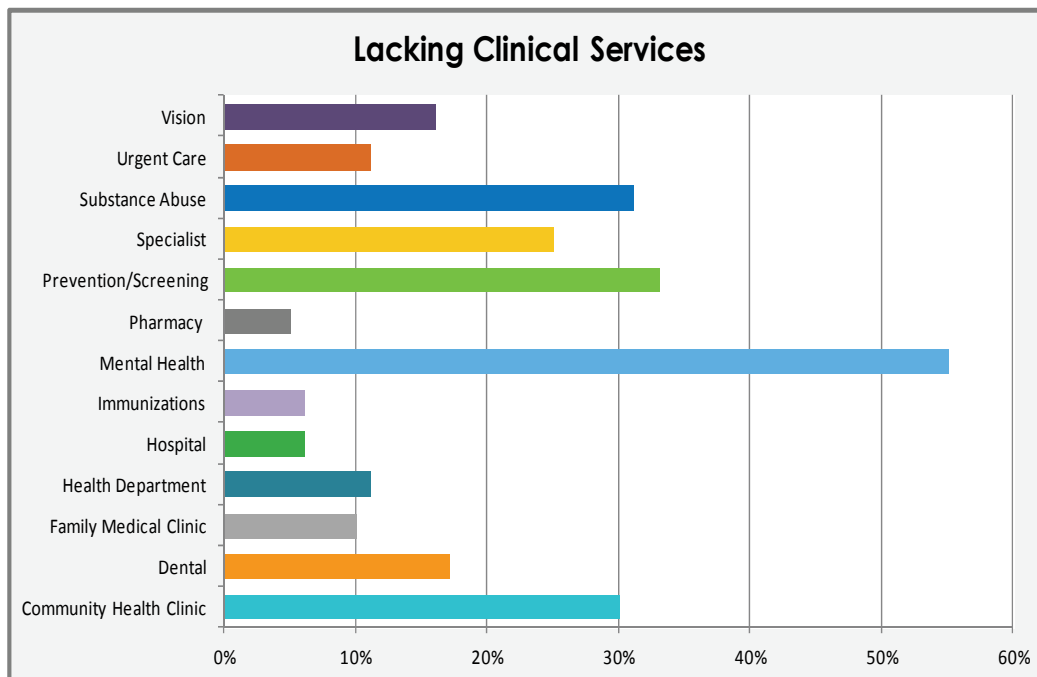
Utah’s Annual Substance Abuse & Mental Health report provides data about the publically funded mental health system. The report estimates the unmet need for treatment.

Additional information is needed to better understand access & utilization issues pertaining to mental health & substance abuse treatment in Davis County.

Lacking Clinical Services

In the 2012 Key Informant Survey this question was asked: In your opinion, what clinical services are most lacking or most difficult to access in Davis County? The question was answered by 298 respondents. The bar chart graphs all 13 clinical service choices from the question menu.

Graph 26: Lacking Clinical Services in Davis County



Source: DCHD, 2012

Fifty-five percent of respondents selected mental health services as those that are most lacking or difficult to access. This theme was reinforced throughout the survey responses. There is concern about the lack of providers, current capacity of the local mental health authority, lack of insurance coverage for mental health, lack of emergency services for mental health issues, lack of psychiatrists, and necessity to go to Salt Lake or Ogden to access services. Lack of mental health services was followed by prevention/screening services, substance abuse, community health clinics, and specialists.

Respondents could choose "other" as an answer. The other most lacking or most difficult to access services that were specified include services for the poor, school nurses, wellness centers, support groups, community outreach, hearing, Planned Parenthood, smoking cessation, and STD education.

Mental Health Services

Mental health services were identified as the clinical services most lacking & most difficult to access in Davis County, according to the 2012 Key Informant Survey.

Diabetes Management

Proper diabetes management requires regular monitoring of blood sugar levels through the HbA1c (A1C) test. Higher levels suggest a change in therapy may be needed. The American Diabetes Association recommends that people with diabetes have an A1C test at least 2 times a year. However, the test should be conducted more often for individuals who are not meeting target blood sugar goals or who have had a recent change in therapy.

Table 38: Diabetes Management & Screening Indicators

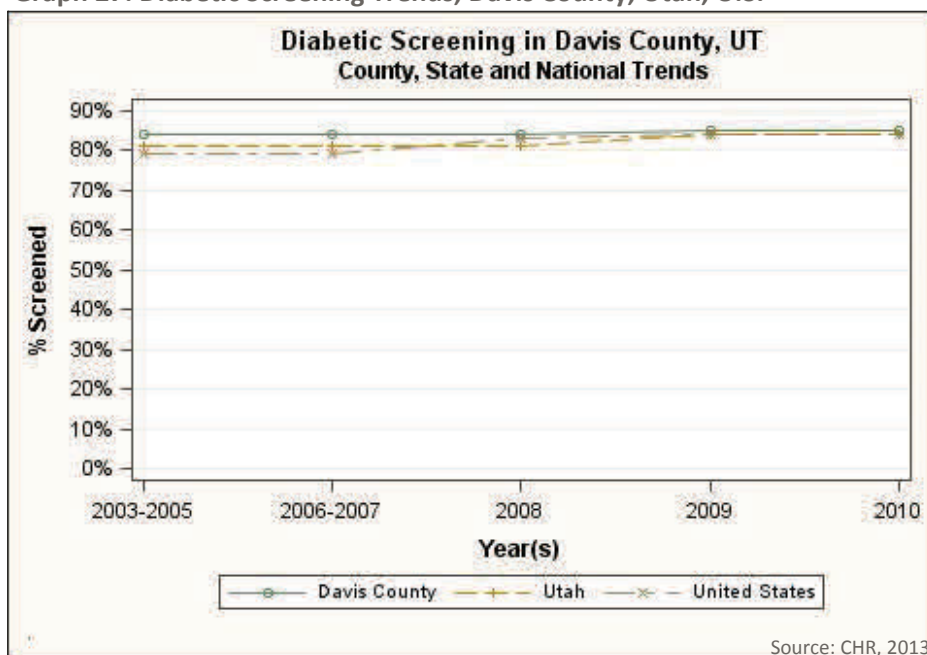
Diabetes Management & Screening	Davis	Utah	U.S.	Source
Diabetes Management, at Least 2 Hemoglobin A1C Tests in 12 Months, Adults (2009–2011)*	69.1%	67%	66%	DCCS, UDOH
Diabetic Screening, Medicare Enrollees (2010)	85%	84%	84%	CHR

*Not meeting the Healthy People 2020 Target 71.1%.

In Davis County, 69.1% of adults with diabetes had at least 2 A1C tests in the last 12 months, slightly better than the state and the nation. However, this was short of the HP2020 target of 71.1%. Diabetic screening in Medicare enrollees is calculated as the percent of diabetic patients whose blood sugar control was screened in the past year using an A1C test. Davis County, Utah, and the U.S. are all similar in this measure with 85%, 84%, and 84%.

Regular A1C screening among diabetic patients is considered the standard of care. It helps assess the management of diabetes over the long term by providing an estimate of how well a patient has managed his or her diabetes over the past 2 to 3 months. When hyperglycemia is addressed and controlled, complications from diabetes can be delayed or prevented.

Graph 27: Diabetic Screening Trends, Davis County, Utah, U.S.



Quality of Care

Davis County is very similar to the state & U.S. when it comes to diabetes screening & management rates.

Regular A1C screening among diabetic patients is considered the standard of care.

Breast Cancer Screening/Mammograms

Breast cancer is the most commonly occurring cancer in U.S. women (excluding basal and squamous cell skin cancers) and the leading cause of female cancer death in Utah. Deaths from breast cancer can be substantially reduced if the tumor is discovered at an early stage. Mammography is currently the best method for detecting cancer early. Most experts agree that women aged 40 or older should undergo routine screening with mammography at least every 2 years.

Table 39: Breast Cancer Screening Indicators

Breast Cancer Screening	Davis	Utah	U.S.	Source
Mammogram within the Past 2 Years, Age 40+ (2010–2011, Age-Adjusted)	66.5%*	65.3%	74.9%	DCCS, UDOH
Mammography Screening, Medicare Enrollees Ages 67–69 (2010)	61%	61%	65.4%	CHR

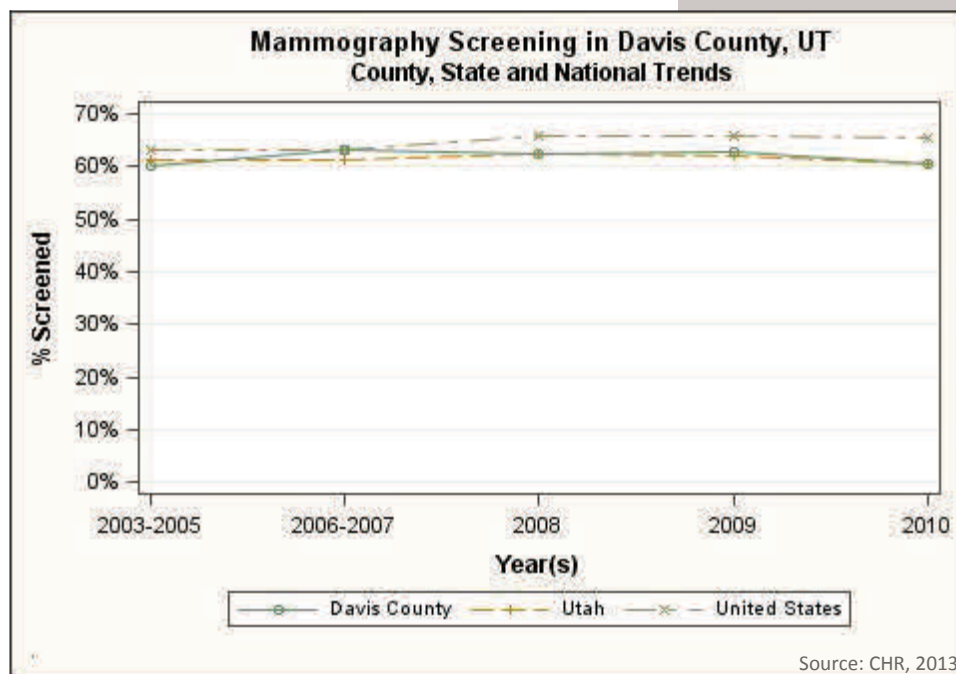
*Not meeting the HP2020 Target 81.1%

In Davis County, 66.5% of women age 40 and over have had a mammogram within the past 2 years. This is similar to the state rate but lower than the nation and is well below the HP2020 target of 81.1%. Of female Medicare enrollees ages 67-69 in Davis County, 61% had a mammogram over a two year period. This also is similar to the state rate but lower than that nation. In 2010, Utah had one of the lowest age-adjusted mammogram screening rates in the nation.

In Utah, the two most frequently reported reasons for not having a mammogram were a lack of time and the belief that it was not needed. A physician’s recommendation or referral, and satisfaction with physicians, are major factors facilitating breast cancer screening.

Women who are at higher than average risk of breast cancer should seek expert medical advice about whether they should begin screening before age 40 and the frequency of that screening.

Graph 28: Mammography Screening Trends, Davis County, Utah, U.S.



Breast Cancer Screening

Davis County is not meeting the Healthy People 2020 target for percent of women ages 40+ who have had a mammogram in the past 2 years. Screening rates are significantly lower than the U.S.

Colorectal & Prostate Cancer Screening

Colorectal Cancer Screening

Colorectal cancer is the second leading cause of cancer-related deaths in the U.S. and Utah. Screening for this cancer is important as deaths can be substantially reduced when precancerous polyps are detected early and removed. The chance of surviving colorectal cancer exceeds 90% when the cancer is diagnosed before it has extended beyond the intestinal wall.

In Davis County, 68% of those age 50+ have had a sigmoidoscopy, colonoscopy, or fecal occult blood test (FOBT). This is slightly better than the state and the nation. However, Davis County is not meeting the HP2020 target, which is 71% of the recommended population screened.

In Utah, the 2 most frequently reported reasons for not having a colonoscopy or sigmoidoscopy were cost and the belief that it was not needed. The rate of colorectal cancer screening is lower for individuals with lower levels of formal education and for Hispanics/Latinos.

Table 40: Colorectal & Prostate Cancer Screening Indicators

Colorectal & Prostate Cancer Screening	Davis	Utah	U.S.	Source
Colorectal Cancer Screening, Age 50+ (2010)	68.0%*	66.2%	66.5%	DCCS, UDOH
Prostate Cancer Screening, PSA Test, Men Aged 40+ (2010)	—	62.5%	64.2%	IBIS, UDOH

*Not meeting the HP2020 Target of 71%

Prostate Cancer Screening

Prostate cancer is the second most commonly diagnosed cancer in men, and second only to lung cancer in the number of cancer deaths. Although screening can detect prostate cancer early, and when found early, treatment may be more effective, there is no agreement among medical experts that prostate cancer screening saves lives.

The prostate cancer screening indicator measures the percentage of men aged 40 and above who reported having a prostate-specific antigen (PSA) test in the last 5 years or who reported ever having had a PSA test. In 2010, U.S. males aged 40 and older were more likely to have ever had a PSA test than Utah males of the same age (64.2% of U.S. males compared with 62.5% of Utah males). Woods Cross/North Salt Lake area has one of the lowest prostate cancer screening rates in Utah at 40.8%. All other Davis County small areas had a rate similar to the state.¹²

The rate of PSA tests has significantly increased among the U.S. male population over the last several years.

Cancer Screening

Screening for colorectal cancer is important as deaths can be substantially reduced when precancerous polyps are detected early & removed.

There is no agreement among medical experts that prostate cancer screening saves lives. However, understanding screening activities might shed some light on Davis County's high prostate cancer death rate.

Immunization & Vaccination

Immunizations

Davis County is not meeting the Healthy People 2020 targets for adults receiving pneumococcal vaccination & children adequately immunized at kindergarten entry.

“I would like to see more awareness about immunizations, including the flu vaccine. It would be good for the public to learn about the impact choosing not to be vaccinated has.”

~Davis County Resident

Vaccinations play a critical part in the prevention of many diseases. Many adults are under-immunized against vaccine preventable diseases like influenza and pneumococcal disease. Barriers to adult immunization include, but are not limited to, cost, lack of knowledge and misconceptions about needed immunizations, and lack of recommendations from healthcare providers.

Influenza, or flu, is an acute viral infection involving the respiratory tract that can occur in epidemics or pandemics. Influenza can cause a person, especially older persons, to be more susceptible to bacterial pneumonia. The percentage of Davis County residents aged 65+ who received a flu vaccine in 2011 is 60.6% which is better than the state and the nation.

Pneumococcal disease is a serious infection of the lungs, blood, or outer lining of the brain. Each year it kills more people in the U.S. than all other vaccine preventable diseases combined. The most common form of serious pneumococcal disease among adults is pneumonia. The clinical outcomes of pneumonia and influenza are often indistinguishable and are grouped together as the 9th leading cause of death in Davis County. The Davis County rate of pneumococcal vaccination for adults aged 65 years and older is 75.1%, which is below the HP2020 target of 90%.

Table 41: Adult & Child Immunization/Vaccination Indicators

Immunizations (2011)	Davis	Utah	U.S.	Source
Adults Receiving Influenza Vaccination in Past 12 Months, Ages 65+	60.6%	56.9%	24.9%	DCCS, UDOH
Adults Ever Receiving Pneumococcal Vaccination, Ages 65+	75.1%*	70.4%	70.0%	DCCS, UDOH
Children Adequately Immunized at Kindergarten Entry	93.9%**	90.9%	95.2%	UDOH
Children Adequately Immunized at 7th Grade Entry	94.1%	92.7%	—	UDOH

*Not meeting the HP2020 Target of 90% **Not meeting the HP2020 Target of 95%

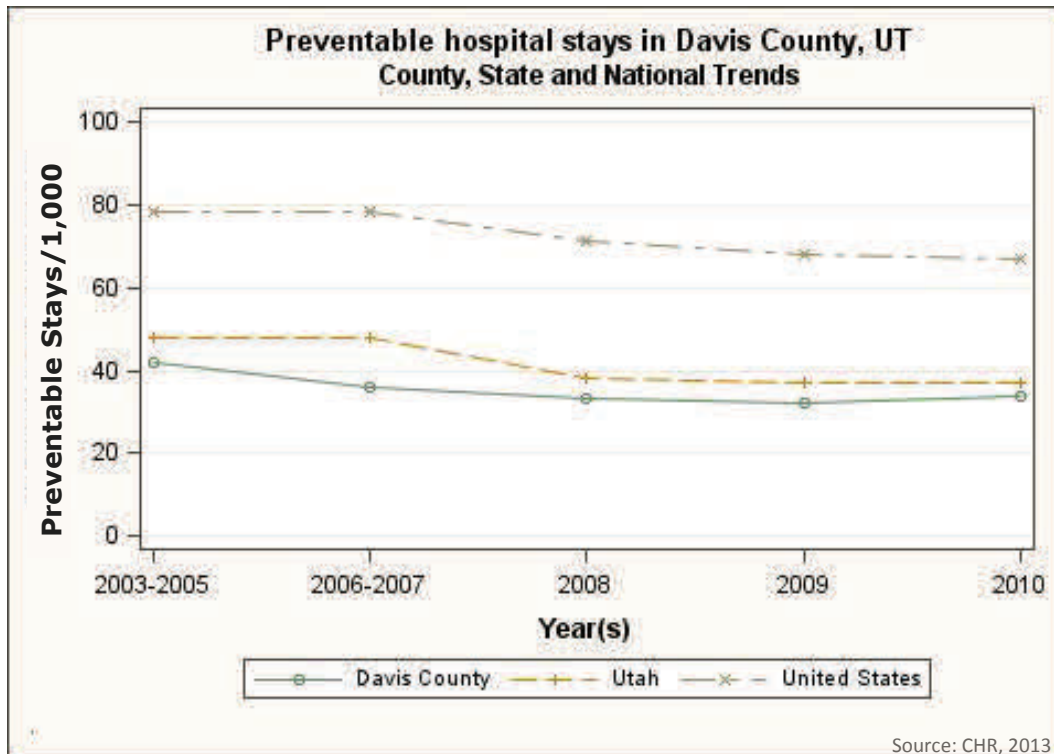
Required kindergarten entry immunizations include: 4 doses of diphtheria, tetanus, and acellular pertussis (DTaP), 3 doses of polio, 2 doses of measles-mumps-rubella (MMR), 2 doses of varicella (chicken pox), 2 doses of Hepatitis A, and 3 doses of Hepatitis B. In Davis County, 93.9% of children entering kindergarten are adequately immunized. Children entering 7th grade must have Hepatitis B, Varicella and Tdap. In Davis County, 94.1% of youth entering 7th grade are adequately immunized.

Utah is in the bottom 10 states in the U.S. for percentage of fully immunized children by age 2. Coverage levels are determined by assessing the basic childhood immunization series, referred to as the 4:3:1:3:3:1 series: 4 DTaP, 3 Polio, 1 MMR, 3 Hib (Haemophilus influenza type b), 3 Hepatitis B, and 1 Chickenpox vaccine. Children under 2 need the most protection because of their developing immune system.

Preventable Hospital Stays

Preventable hospital stays is measured as the hospital discharge rate for ambulatory care-sensitive conditions per 1,000 Medicare enrollees. In Davis County that is 34 per 1,000 compared to 37 per 1,000 in Utah and 67 per 1,000 in the U.S. (2010). Davis County is doing well in this category and is in the top 10% (best) of counties in the nation.

Graph 29: Preventable Hospital Stay Trends, Davis County, Utah, U.S.



Medicare claims data limits the population to mostly individuals age 65 and older. This measure, therefore, may potentially miss trends and disparities among younger age groups.

Hospitalization for diagnoses treatable in outpatient services suggests the quality of care provided in the outpatient setting was less than ideal. The measure may also represent a tendency to overuse hospitals as a main source of care.

Utah Hospital Comparison Report

The 2011 Utah Hospital Comparison Report is available online to compare Utah's hospitals based on charges, quality, and patient safety. Best, average, and below average ratings for specific procedures conducted in hospitals are available for the public to view and search by hospital, zip code, and region. Additional detailed quality statistics are also available. Information can be found at health.utah.gov/myhealthcare.

Quality of Care

Davis County is in the top 10% in the country, & is doing well when it comes to preventable hospital stays among Medicare enrollees.

The 2011 Utah Hospital Comparison Report compares Utah's hospitals based on charges, quality & patient safety. It is available online at health.utah.gov/myhealthcare.

Social & Economic Factors

A range of personal, social, economic, and environmental factors also known as social determinants of health contribute to individual and population health. For example, people with a quality education, stable employment, safe homes and neighborhoods, and access to preventive services tend to be healthier throughout their lives. Conversely, poor health outcomes are often made worse by the interaction between individuals and their social and physical environment. Social and economic factors may have the most influence on health. Higher income and education equates to better health.

Social determinants are in part responsible for the unequal and avoidable differences in health status within and between communities. These indicators provide some understanding about the critical role of home, school, workplace, neighborhood, and community in improving health.

Davis County ranks 4th in the state for social and economic factors.

Social/Economic

Social & economic factors include education, employment, income, family/social support & community safety.

Davis County ranks 4th in the state for social/economic factors.

Social & economic factors also known as the social determinants of health may have the most influence on health. Higher income & education equates to better health.

Education

The relationship between educational attainment and improved health outcomes is well known. Better-educated individuals live longer, healthier lives than those with less education, and their children are more likely to thrive. People with better education are more likely to understand the consequences of life choices, are more capable to make good life choices, and are more able to deal with stress and other environmental factors that influence health. In addition, education strongly correlates with income and work benefits.

The CHR use 2 measures to represent education: the high school graduation rate and the percent of adults ages 25 to 44 with some post-secondary education. Other educational attainment indicators are available through the U.S. Census.

Table 42: Education Indicators

Education	Davis	Utah	U.S.	Source
High School Graduation Rate* (2010–11)	82%**	76%	—	CHR
High School Graduate or Higher, Age 25+ (2007–2011)	95.1%	90.6%	85.4%	U.S. Census
Some College, Ages 25-44 (2007–2011)	75%	67%	54%	CHR
Educational Attainment, 25+ with Bachelor's (2007–2011)	34.1%	29.6%	28.2%	U.S. Census

*Data should not be compared with prior years due to changes in definition. **Not meeting HP2020 target 82.4%.

High school graduation is defined as the percent of the ninth-grade cohort that graduates high school in 4 years. In Davis County the high school graduation rate is 82% which is better than the state average of 76% but just under the HP2020 target of 82.4%. The percent of adults (25+) that are high school graduates in Davis County is 95%. This is higher than the state rate of 90.6% and the national rate of 85.4%.

Among adults ages 25-44, 75% have some college/post secondary education. Davis County is in the top 10% (best) of counties in the country for this indicator. The percent of adults (25+) with a bachelor’s degree or higher is 34.1%, higher than the state average of 29.6% and the national average of 28.2%.

The CHNA.org toolkit was used to create a vulnerable population footprint for educational status. Just a few communities in Davis County at the census tract level had more than 10% of the population without a high school diploma, which includes 1253.01 in Sunset with 13.58%, 1258.01 in Clearfield with 11.28%, 1270.02 in North Salt Lake with 11.26%, and 1260.01 in Layton with 10.62%. A map with these areas highlighted can be found in **Appendix 9**.

Education

Education level is strongly related to health status.

Davis County residents are very well educated. Of adults ages 25 & older, 95% have graduated from high school, 75% have some college & 34% have a bachelor’s degree or higher.

Employment

Employment measures aim to show the percentage of the population unemployed and seeking work. Unemployment figures shed light on a community’s overall economic situation and provide information about the percentage of the population that may be at risk for various health concerns associated with unemployment.

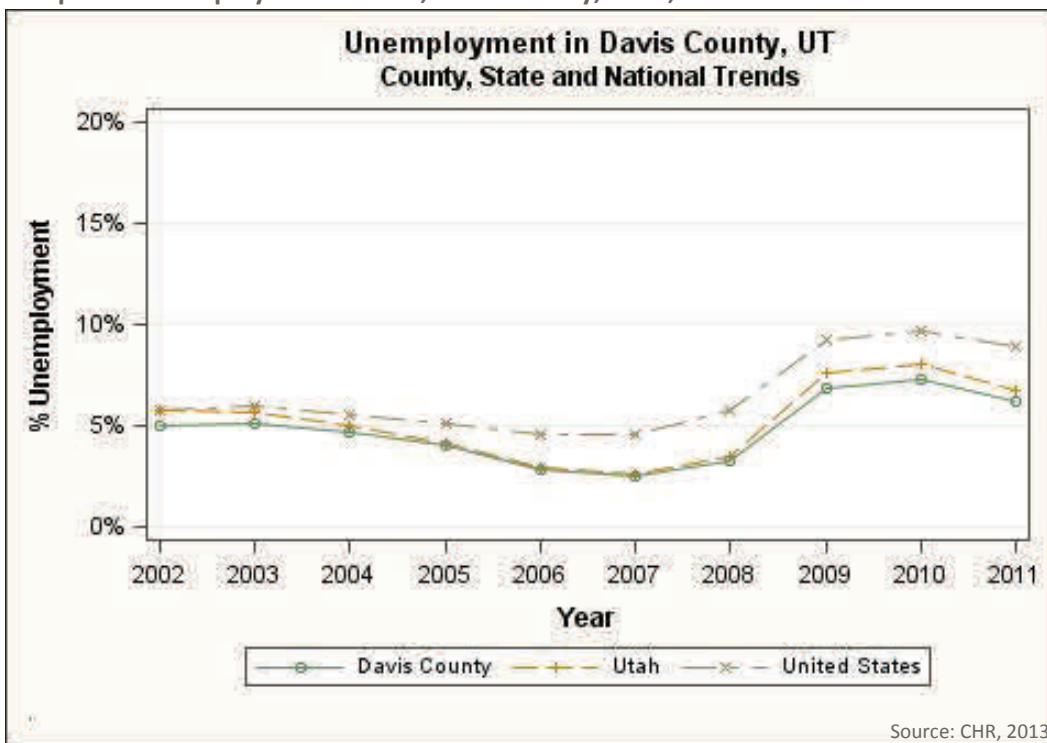
The official unemployment rate/annual average unemployment rate is the total unemployed, as a percent of the civilian labor force that includes those age 16 and older. In Davis County, 6.2% of the labor force was unemployed, which in 2011, was just below the state average and also better than the national average.

Table 43: Employment Indicator

Employment	Davis	Utah	U.S.	Source
Unemployment Rate (2011)	6.2%	6.7%	9.0%	CHR

While unemployment is relatively low in Davis County, this unemployment rate doesn’t take into account workers who do not have secure employment, who may be temporary, part-time, or in another situation. Also of concern is the percent of residents who have jobs but don’t earn a sufficient income to meet the needs of their families or have a job that does not offer health insurance.

Graph 30: Unemployment Trends, Davis County, Utah, U.S.



Employment

Davis County has an annual unemployment rate of 6.2%.

The county rate has typically stayed below the state & national averages for the past decade.

Income

Income and financial resources are important to health. The CHR provide information about a community’s ability to meet basic needs necessary to maintain health through an estimate of poverty. Poverty is commonly considered insufficient income to meet the needs for food, clothing, and shelter.

Households with higher incomes have better healthcare coverage and access to health services. People with higher incomes are more likely to have healthier diets, participate in recreational and personal fitness activities, and deal with stress.

Table 44: Income Indicators

Income	Davis	Utah	U.S.	Source
Median Household Income (2007–2011)	\$69,147	\$57,783	\$52,762	U.S. Census
Persons Below Poverty Level (2007–2011)	7.2%	11.4%	14.3%	U.S. Census
Children in Poverty (2011)	10.0%	16.0%	22.5%	CHR
Children Eligible for Free Lunch (2011)	19.0%	31.0%	—	CHR

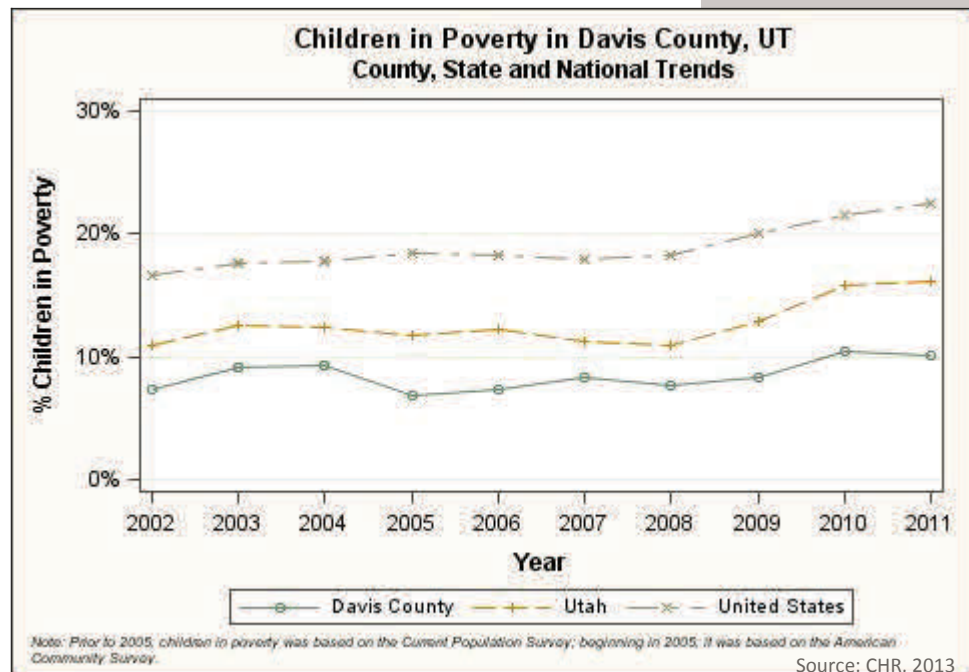
Davis County’s median household income is \$69,147, which is higher than Utah at \$57,783 and the U.S. at \$52,762. Due to Davis County’s larger families, per capita income (\$25,244) is lower compared to the U.S. (\$27,344) but higher than Utah (\$23,139).

Census estimates indicate that 7.2% of Davis County residents live below the federal poverty level, which equates to approximately 22,000 individuals. This is significantly better than the state at 11.4% and the nation at 14.3%.

Among Davis County’s children, 10% live in poverty. This is much lower than the state at 16% and the U.S. at 22.5%. Davis County’s low rate puts it in the top 10% (best) of counties in the U.S.

In 2011, 19% of Davis County’s school age children were eligible for free school lunch.

Graph 31: Children in Poverty Trends, Davis County, Utah, U.S.



Income

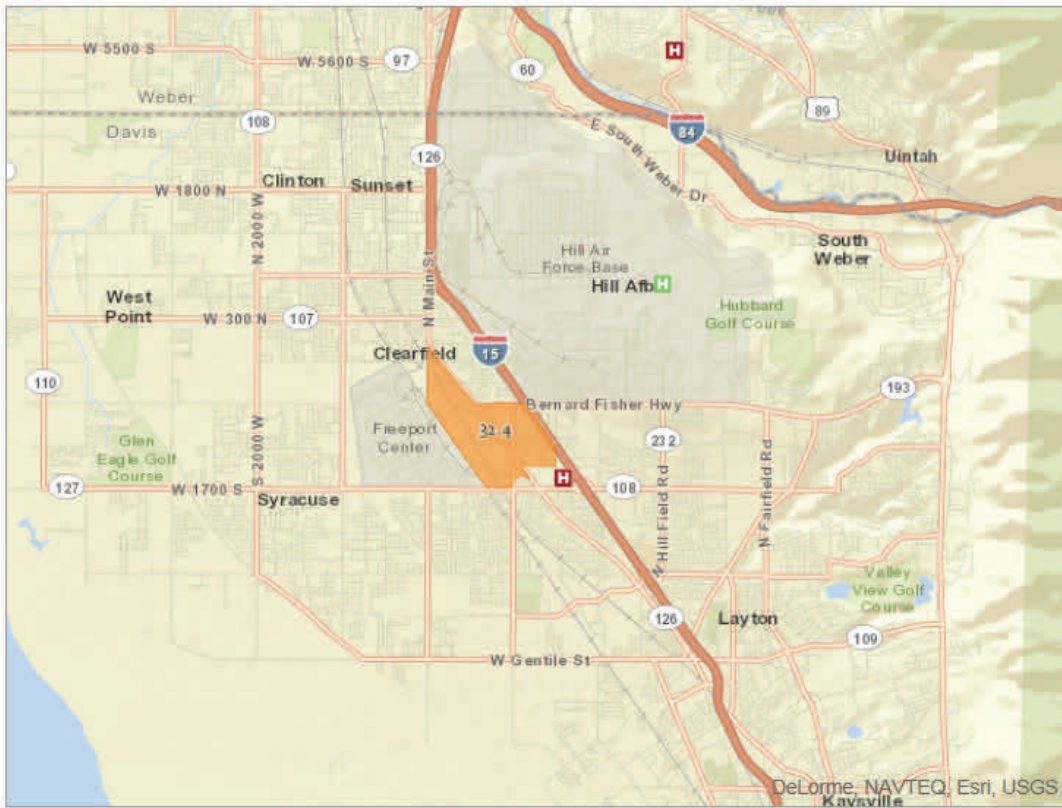
Insufficient income was identified as a leading barrier to access healthcare & a leading force working against health in Davis County according to the 2012 Key Informant Survey.

Economic Disparities

Cities with the most residents living in poverty are Clearfield and Sunset at 8.3%. Cities with the fewest people living in poverty are Farmington and Centerville at 2.1%.

One section of Clearfield (Census Tract 1257.01) has been identified as a vulnerable population because 32.4% of the population is below the federal poverty level. A range of public services is within the boundaries of the area including the Davis County Health Department, Midtown Community Health Center Davis County Medical and Dental Clinics, and Davis Community Learning Center at Wasatch Elementary (A United Way Promise Partnership).

Map 3:



Vulnerable Population Footprint

Footprint Definition:

% Population Below Poverty Level \geq 30%
 % Population Less Than High School \geq 25%

Map prepared by CHNA toolkit, 05/15/2013

Data Source:

Hospitals: Centers for Medicare & Medicaid Services, Provider of Services data, 2011.
 Population data: U.S. Census Bureau, 2007-2011 American Community Survey 5-Year Estimates.

Low-Income Area

In one section of Clearfield over 32% of the population is below poverty level.

Vulnerable Population Footprint

Areas Above Both Thresholds

% Population Less Than HS

- 40% or More
- 30% - 40%
- 20% - 30%
- 10% - 20%
- Less than 10%

% Population Below Poverty

- 40% or More
- 30% - 40%
- 20% - 30%
- 10% - 20%
- Less than 10%

Hospitals

Hospitals (CMS POS 2011)

- Public
- Private
- Unspecified

Focus groups with low income-families were conducted in 2012. The results show members of the community are very resourceful. They are aware of how to access free or low-cost medical service, they participate in government programs, many grow their own produce, participate in co-ops, find deals on KSL classified ads, and shop case lot sales. Families also take advantage of free and low-cost recreation and participate in community events.

Housing

In 2011 there were 92,652 households in Davis County. The average household size is 3.22, which is higher than Utah at 3.06 and the U.S. at 2.6.

The rate of homeownership in Davis County is 78.6%, which is higher than the state average of 70.7% and the nation at 66.1%. The average home value is \$228,200, which is higher than the state at \$221,300 and the nation at \$188,200. High cost of housing is indicated by the percent of households with housing costs that are greater than or equal to 30% of the household income. In Davis County, 29% are in this situation compared to 33% in Utah.

Table 45: Housing Indicators

Housing (2007–2011)	Davis	Utah	U.S.	Source
Homeownership Rate	78.6%	70.7%	66.1%	U.S. Census
Median Value of Owner-Occupied Housing Units	\$228,200	\$221,300	\$186,200	U.S. Census
% of Households with Housing Costs >=30% of Household Income	29.0%	33.0%	—	CHR
Housing Units in Multi-Unit Structures	15.5%	21.3%	25.9%	U.S. Census

There is a relatively low rate of multi-unit housing structures in the county, 15.5% versus 21.3% for Utah and 25.9% for the U.S. In 2010, the fair market rent for a 2 bedroom unit was \$767 in Davis County. About 36% of renters are unable to afford fair market rent.¹⁹

Cities with the most multi-unit housing structures also have a higher population density. Clearfield has 3,950 persons per square mile (ppsm). Lowest-density cities are the most rural communities and include South Weber at 1,297 ppsm and West Point at 1,302 ppsm.

Affordable and safe housing is not a problem for most Davis County residents. However, if additional housing indicators such as short sales, foreclosures, and those who are upside down in their mortgages was examined, it would provide more valuable information about housing security throughout the county.

Low-income families in Davis County who participated in the 2012 focus groups experience housing problems such as small space, old pipes, tobacco use by neighbors, bad landlords, fungus, insects, neighbors who are strangers, etc. Some have moved in with relatives because they cannot afford housing.

Davis County has a small homeless population that is not visible to the general public. There is no homeless shelter in the county. According to the Davis School District in 2011, 1,523 children within 1,293 families were considered homeless. This includes families doubled up with friends or relatives because they cannot find or afford housing.

Housing

Low-income families in Davis County who participated in 2012 focus groups experience housing problems such as small space, old pipes, tobacco use by neighbors, bad landlords, fungus, insects, neighbors who are strangers, etc. Some have moved in with relatives because they cannot afford housing.

Family & Social Support

The CHR define family and social support as the quality of relationships among family members and with friends, colleagues, and acquaintances, as well as involvement in community life. Evidence has demonstrated that poor family and social support is associated with increased morbidity and early mortality.

There are 75,213 families residing in the county. Families are different than households because of the presence of children 18 and under. The average family size is 3.63. Of the families, 85% (63,706) had husbands and wives living together.

The number of parents living with a child helps to determine the human and economic resources available to that child. Children who live with 1 parent are more likely to live in poverty than children who grow up in households with 2 adults. Single parents also face specific challenges including lack of leisure time, increased need for child care, and stressed financial resources.

Table 46: Family & Social Support Indicators

Family & Social Support	Davis	Utah	U.S.	Source
Children in Single-Parent Households (2007–2011)	15.0%	18.0%	31.0%	CHR
Single Female Households with Children (2010)	5.7%	5.5%	7.2%	DCCS, UDOH
Single Male Households with Children (2007–2011)	2.1%	2%	2.2%	U.S. Census
Inadequate Social Support, Adults (2005–2010)	13.0%	15.0%	19.0%	CHR

The percent of children living in family households who are raised by a single parent is 15% in Davis County compared to 18% in Utah. Davis County’s low rate puts it in the top 10% (best) of all counties in the U.S. for this indicator.

The social and emotional support measure is based on responses to the question, How often do you get the social and emotional support you need? The CHR report the percent of the adult population that responds they never, rarely, or sometimes get the support they need. In Davis County 13% of adults are considered to be getting inadequate social support compared to 15% in Utah. Davis County’s low rate puts it in the top 10% (best) of all counties in the U.S. for this indicator.

Social risk factors of most concern for youth are: parental attitudes favorable to anti-social behavior, poor family management, and family conflict as assessed in the 2011 prevention needs assessment survey. Other social indicators related to youth family, school, peer, and neighborhood risk factors and protective factors can be found in the prevention needs assessment survey results and by reviewing the Layton and Bountiful Communities that Care (CTC) needs assessments.

Family Support

Davis County is among the best of all counties in the U.S. for low rates of children in single-parent families & inadequate social support for adults.

Examining the 2011 prevention needs assessment survey points to priority social risk factors for students, which include parental attitudes favorable to anti-social behavior, poor family management & family conflict.

Community Safety & Crime

The health impacts of community safety are far-reaching, from the significant impact of violence on a victim to the symptoms of Post-Traumatic Stress Disorder (PTSD) and psychological distress felt by those who are regularly exposed to unsafe communities. Community safety impacts other health factors and outcomes as well, including birth weight, diet and exercise, and family and social support.

High levels of violent crime compromise physical safety and psychological well-being. High crime rates can also deter residents from pursuing healthy behaviors such as exercising outdoors. Additionally, exposure to crime and violence has been shown to increase stress, which may exacerbate hypertension and other stress-related disorders.

Table 47: Violent Crime Indicators

Community Safety	Davis	Utah	U.S.
Violent Crime Rate (2008–2010)	108	217	274
Homicide Rate (2004–2010)	1	2	—

Source: CHR, 2013. Rates per 100,000 Population

Davis County is recognized as a safe community by residents. The annual violent crime rate in Davis County is 108 crimes per 100,000 population compared to 217 in Utah and 274 in the U.S. Violent crimes are defined as offenses that involve face-to-face confrontation between a victim and a perpetrator, including homicide, forcible rape, robbery, and aggravated assault. In Davis County there is on average 1 death per year due to homicide per 100,000 population compared to 2 in Utah.

Local police departments monitor some crime statistics by using data available from the Federal Bureau of Investigation (FBI). The FBI’s Uniform Crime Reporting Program collects the number of offenses that come to the attention of law enforcement for violent crime and property crime including murder, manslaughter, rape, robbery, aggravated assault, burglary, larceny-theft, motor vehicle theft, and arson. These measures are fairly standard across jurisdictions and local law enforcement agencies can use them to help establish baselines, monitor trends, and make comparisons to other cities in the area. The most common crimes in Davis County cities are property crimes and larceny-theft.²⁰

Several cities in Davis County have safe housing programs. Clearfield and North Salt Lake have good landlord ordinances that include financial incentives for participation. Layton has a crime-free housing program.

Community Safety

Davis County has a lower rate of violent crime than the state & nation.

Several cities in Davis County have safe housing programs. Clearfield & North Salt Lake have good landlord ordinances that include financial incentives for participation. Layton has a crime-free housing program.

Physical Environment

A community's health is also affected by the physical environment. A safe, clean environment that provides access to healthy food and recreational opportunities is important to maintaining and improving community health. The CHR include indicators for both environmental quality and the built environment. Davis County ranks 13th in the state for physical environment, the county's lowest ranking in any section.

Environmental Quality

Adequate environmental quality in terms of clean air, water, food, and sanitation are prerequisites for health. Poor air or water quality can be particularly detrimental to the very young, the old, and those with chronic health conditions.

Built Environment

The built environment refers to human-made (versus natural) resources and infrastructure designed to support human activity, such as buildings, roads, parks, restaurants, grocery stores, and other amenities. Information on the availability of healthy food and opportunities for exercise will enable communities to take action to reduce adverse health outcomes associated with a poor diet and lack of physical activity. Indicators related to energy efficiency were discussed in an effort to see if anything meaningful could be included in this assessment. Limited data exists at the county level and no applicable or relevant information was found for this report.



Environment

The CHR measure indicators for both environmental quality & the built environment.

Davis County ranks 13th in the state for physical environment, the county's lowest ranking in any section.

Residents of Davis County mention how clean it is here compared to other places.

~2012 Focus Groups

Air Quality

The relationship between elevated air pollution and compromised health has been well documented. The negative consequences of ambient air pollution include decreased lung function, chronic bronchitis, asthma, and other adverse pulmonary effects. Exposure to excessive levels of fine particulate matter is associated with compromised respiratory function along with all-cause mortality. Studies have demonstrated several pollutants, notably ozone and fine particulate matter (particulates less than 2.5 micrometers in diameter), that can contribute to increased morbidity and mortality.

Most of the time air quality is good in Davis County and along the entire Wasatch Front. However, there are times during the winter when Davis County experiences high levels of air pollution, levels that are among the worst in the nation. These high pollution periods occur during temperature inversions.

Temperature inversions are common in mountainous areas. Inversions happen during the winter when warm, high pressure systems trap colder air in mountain valleys and keep it there. The cold air mixes with emissions from cars, home/commercial heating, and industrial processes to form fine particulate matter (PM2.5) in the atmosphere. Because the air isn't moving, the pollution has nowhere to go and begins to build up. An inversion will linger until wind or a storm front comes through.



Air quality is the leading environmental health concern in Davis County, identified in the 2012 Key Informant Survey. In the open-ended response survey, an overwhelming 80% (292) of respondents documented air quality is a main concern. Air quality was also documented as a health concern for adults and children. Air pollution was identified as the leading force working against health in Davis County.

Air Quality

Air pollution was identified as the leading environmental health concern & the leading force working against health in Davis County according to the 2012 Key Informant Survey.

“The problem I have with the mountains is that they keep the inversion in. My kids have asthma so that keeps them inside. So I love the mountains, but I hate the mountains.”

~Davis County Resident

Air Monitoring

The Air Monitoring Center (AMC) is responsible for operating and maintaining an ambient air monitoring network that protects the health and welfare of the citizens of Utah. The AMC provides air pollution information for the daily air quality, health advisories, winter season wood burn conditions, and summer season ozone action alerts. The AMC data is used to determine the relationship of existing pollutant concentrations to the National Ambient Air Quality Standards, to assist in the development of strategies to reduce pollution levels where necessary, and track the effectiveness of those strategies.

The Bountiful/Viewmont air monitor is the primary location for Davis County measures. It is located at the northern end of Bountiful, which is situated in the southern end of the county. The site is used to determine public exposure to air pollution. The site also monitors the ambient air near the oil refineries and local sand and gravel operations. The monitor is specialized to measure particulate matter 2.5 micrometers or less (PM_{2.5}) every 3 days. The monitor does not measure larger particulates known as PM₁₀.

Assessing air quality data in the county can be challenging because of changes in monitor locations, what is measured, and how often it is measured. To get an accurate picture of air quality across Davis County, air monitor measures from the north end of Salt Lake County and southern end of Weber County should also be considered.



Air Monitoring

**The Bountiful/
Viewmont air
monitor is the
primary location
for monitoring
Davis County air
quality.**

**“I love
absolutely
everything
about Davis
County.
Everything is
better here,
except the air
quality.”**

~Davis County Resident

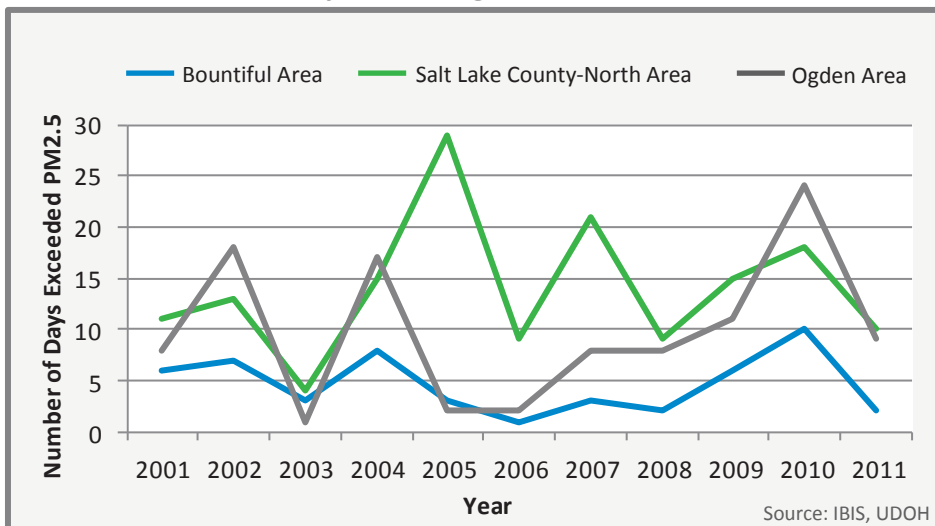
National Air Quality Standards

Particulate Matter (PM) is a complex mixture of extremely small dust and soot particles. PM is typically measured in 2 categories: PM10 and PM2.5. PM10 is matter 10 micrometers in diameter or less, about one-seventh the width of a strand of human hair. PM2.5 is even smaller, 2.5 micrometers or less.

They are produced anytime fuels such as coal, oil, diesel or wood are burned. Fine particles come from fuel used in everything from power plants to wood stoves and motor vehicles (e.g., cars, trucks, buses and marine engines). These particles are also produced by construction equipment, agricultural burning and forest fires.

U.S. Environmental Protection Agency (EPA) PM2.5 Salt Lake Nonattainment Area
On December 14, 2009, the EPA identified the Provo, Salt Lake, and Logan Utah/Idaho areas as not meeting the federal health standard for PM2.5, and directed the State of Utah to find ways to reduce wintertime pollution in those areas. The area involves 7 counties, including Davis. The area is an EPA nonattainment area because of high levels of PM2.5 over a 24-hour standard. Salt Lake City-Ogden-Clearfield, Utah, metropolitan area is ranked 6th most polluted (out of 277) in the nation for short-term particle pollution (24-hour PM2.5)²¹. The number of PM2.5 days over the standard varies from year to year. See the graph below.

Graph 32: PM2.5 Levels Over the National Ambient Air Quality Standard: Bountiful, Salt Lake County-North & Ogden Areas 2001–2011



PM2.5 can get deep inside the lungs and cause symptoms such as painful breathing, chest tightness, headache, and coughing. PM2.5 can exacerbate respiratory infections, trigger asthma attacks and symptoms, and cause temporary reductions in lung capacity. Respiratory symptoms are more likely to occur when PM2.5 levels exceed the EPA standard, but are possible when PM2.5 levels are below the standard, especially in sensitive populations. PM2.5 also influences the environment by causing haze, which reduces visibility. The long-term effects of PM2.5, which settles in the soil, natural water sources, forests, and agricultural areas, are still to be determined.

PM2.5

Particulate matter smaller than 2.5 microns in diameter (PM2.5) is one pollutant that causes the greatest threat to human health.

Davis County is in an EPA nonattainment area because of high levels of PM2.5 over a 24-hour standard.

Maps of nonattainment & maintenance areas in Utah can be found in Appendix 10.

National Air Quality Standards

EPA PM10 Nonattainment Area

Coarse dust particles range in size from 2.5 to 10 micrometers in diameter (PM10). Particles of this size are produced during crushing or grinding and from vehicles traveling on paved or unpaved roads. Salt Lake County, on the southern border of Davis County, is a nonattainment area for PM10. Exceptional events such as high wind or fire can have a big impact on PM10 levels.

EPA Ozone Maintenance Area

Ozone is a clear, colorless gas composed of molecules of 3 oxygen atoms. Ground-level ozone can be inhaled and is considered a pollutant. Ground-level ozone should not be confused with the stratospheric ozone layer that is located approximately 15 miles above the Earth's surface. Ground-level ozone is formed by a complex chemical reaction involving volatile organic carbon compounds (VOCs) and oxides of nitrogen in the presence of sunlight. Ozone production is a year-round phenomenon. However, the highest ozone levels generally occur during the summer when strong sunlight, high temperatures, and stagnant meteorological conditions combine to drive chemical reactions and trap the air within a region for several days. There are unique circumstances where high ozone levels can occur during the wintertime. In Utah, wintertime ozone is associated with temperature inversions and snow cover.

Davis County is a maintenance area for ozone. It is an area that was once designated as nonattainment, and which subsequently demonstrated to the EPA that it will attain and maintain the particulate standard for a period of 10 years.

Air Pollution Over the National Standards

The average number of days above National Ambient Air Quality Standards (NAAQS) is just one of several ways to look at the air quality data collected by monitors.

Table 48: Air Pollution Over National Standard Indicators

Air Pollution	# of Days
PM2.5 Average # of Days Over National Standard, Salt Lake County-North (2000–2011)	13
PM2.5 Average # of Days Over National Standard, Bountiful (2000–2011)	4.58
PM2.5 Average # of Days Over National Standard, Ogden (2000–2011)	9.25
Ozone 8-Hour Average # of Days Over National Standard, Bountiful (2001–2011)	7.91

Source: UDOH

The average number of PM2.5 days over the national standard is 4.58 in Bountiful, 9.25 in Ogden, and 13 in Salt Lake County-North. The average number of ozone days over the nation standard was 7.91 in Bountiful. PM10 measures were not available for Davis County.

PM10

Salt Lake County, on the southern border of Davis County, is a nonattainment area for PM10.

“Where we are in North Salt Lake, the inversion & air quality is really bad. The refineries are contributing to the poor air. There are also the rock & gravel pits that add to the dirty air.”

~Davis County Resident

Air Quality Index (AQI)

The Air Quality Index (AQI) is an index for reporting daily air quality. It tells how clean or polluted the air is and associated health effects. The EPA calculates the AQI for 5 major air pollutants regulated by the Clean Air Act: ground-level ozone, particle pollution (also known as particulate matter), carbon monoxide, sulfur dioxide, and nitrogen dioxide. For each of these pollutants, the EPA has established national air quality standards to protect public health. The EPA has assigned a specific color to each AQI category to make it easier for people to understand quickly whether air pollution is reaching unhealthy levels in their communities.

Table 49: Air Quality Index

Air Quality Index Levels of Health Concern	Numerical Value	Meaning
Good	0 to 50	Air quality is considered satisfactory, and all pollution poses no litter or risk.
Moderate	51 to 100	Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution.
Unhealthy for Sensitive Groups	101 to 150	Members of sensitive groups may experience health effects. The general public is not likely to be affected.
Unhealthy	151 to 200	Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects.
Very Unhealthy	201 to 300	Health warnings of emergency conditions. The entire population is more likely to be affected.
Hazardous	301 to 500	Health alert: everyone may experience more serious health effects.

Source: Airnow.gov

Ground-level ozone and airborne particles are the two pollutants that pose the greatest threat to human health. During inversion episodes the chemical components of PM2.5 include: ammonium, nitrate, organic carbon, elemental carbon, sulfate, crustal, sodium, and others. Davis County averages 13 unhealthy PM2.5 days and 4 unhealthy ozone days per year.

Table 50: Air Quality Index, Unhealthy Day Status

Air Quality Index/Air Alert Status (2009-2011)	Davis
# of Orange/Red/Purple Days High PM2.5	13
# of Orange/Red/Purple Days High Ozone	4

Source: American Lung Association, 2013

Air Quality Index

Davis County averages 13 unhealthy PM2.5 days & 4 unhealthy ozone days per year.

“Because of the inversion in the area, my asthma is significantly worse. My kids have the same problem. They can’t even go outside to play at school because the air is so bad.”

~Davis County Resident

Vehicle Emissions

Vehicles contribute over half of the emissions that lead to formation of fine particulates. In 2011 there was at least 2,508,091,113 Vehicle Miles of Travel (VMT) in Davis County that is a result of being a suburban community where a high proportion of the population commutes to work in surrounding counties. Almost 80% of the workforce in Davis County drives alone to work. This is higher than the state average of 76%.

Table 51: Travel & Vehicle Emissions Indicators

Travel & Vehicle Emissions	Davis	Source
Commuting Alone (2007-2011)	79%	CHR
Vehicle Miles of Travel/VMT (2011)	2,508,091,113	UDOT
Smoking Vehicles Reported (2011)	56	DCHD
Failed Emissions Tests (2011)	9,783 (5.3%)	DCHD

Vehicles emitting excessive smoke contribute to poor air quality. The DCHD regulates private vehicle-testing sites throughout the county to ensure Davis County vehicles are operating cleanly and efficiently. Getting polluting vehicles repaired or off the road is done in an effort to improve air quality. In 2011, 9,783 vehicles failed an initial emissions test. This represents 5.3% of all vehicles tested.

The DCHD also oversees an extensive diesel vehicle-testing program, ensuring diesel vehicles don't exceed 20% opacity (tail pipe emissions).

A smoking vehicle education and notification program is available for the public to use to report smoking vehicles. In 2011, 56 smoking vehicles were reported.

Air pollution concentrations are a function of meteorology, geography, and many types of emissions. While meteorology and geography cannot be controlled, emissions can be controlled. Emissions reduction is the focus of air quality control strategies for automobiles and industrial facilities.



Vehicle Emissions

Vehicles contribute over half of the emissions that lead to formation of fine particulates.

The DCHD oversees one of the most robust diesel vehicle testing programs in the country.

“I think public transportation is getting better.

There is a perception that Utahns need their cars!”

~Davis County Resident

Drinking Water

Water is a precious commodity within our state. Healthy living requires an adequate supply of good quality water for drinking and domestic uses. People drink and use water every day. The majority of Americans get their water from a community water system versus a smaller water supply such as a household well. The EPA sets regulations for treating and monitoring drinking water delivered by community water systems.

Contaminants in drinking water have the potential to affect many people. There are water quality standards and monitoring requirements for over 90 contaminants. If a person is exposed to a high enough level of a contaminant, he or she may become ill. Effects can be short term or long term and depend on the specific contaminant, the level of contaminant in the water, and the person’s individual susceptibility. Drinking water protection programs play a critical role in ensuring high-quality drinking water and in protecting the public’s health.

Table 52: Drinking Water Indicators

Drinking Water	Davis	Utah	U.S.	Source
% of Population Served by Public Drinking Water Systems (2007)	99.9%	98.2%	90.0%	IBIS, UDOH
% of Drinking Water Systems with Violations (FY 2012)	17.0%	13.0%	9.0%	CHR
% of Population with Fluoridated Water Supply (2010)	96.8%	54.0%	66.2%	DCHD, CDC, OHP-UDOH

There are 26 drinking water systems in Davis County. An estimated 99.9% of the county population is served by a state-approved, regulated public drinking water system. These systems are routinely monitored for public health protection. The remainder of the population is served by private wells. In FY 2012, 17% of the population was exposed to water with at least 1 health-based violation. The majority of the violations were due to lack of proper drinking water monitoring, sampling errors, and detection of coliform (an indicator of potentially harmful bacteria). All water system violation issues have been resolved.

Davis County became a fluoridated community in 2001 through the Davis County Board of Health Regulation Regarding Drinking Water Fluoridation. The majority of residents, 96.8%, are served by a fluoridated water supply. Woods Cross city has a legal exemption and therefore does not participate.

Drinking Water

Nearly 97% of Davis County residents have fluoridated drinking water.

“Davis County residents have excellent drinking water quality & systems. People take for granted they can turn on their tap at any time & receive such great service.”

~Davis County Sanitary Survey Inspector

“We supply clean drinking water & are constantly looking for ways to improve.”

~Davis County Drinking Water Provider

Recreational Water

In 2012 there were no mercury fish consumption advisories in Davis County. However, since 2006, a consumption advisory for waterfowl harvested from the Great Salt Lake marshes is in place because of elevated levels of mercury detected. The advisory states that Common Goldeneye, Cinnamon Teal, and Northern Shoveler ducks from the Great Salt Lake should not be consumed.²²



The DCHD has been sampling 18 stream sites throughout the county for *E.coli* since 2008. This data is currently being analyzed by the Utah Department of Environmental Quality (DEQ) to determine if any of these waters are impaired because of high *E.coli* levels.



Since 2011, the DCHD has joined efforts with the DEQ and U.S. Geological Survey (USGS) to set baseline standards for key contaminants in the water of the Great Salt Lake. Several types of samples are collected including selenium, total and methyl-mercury, trace metals, and nutrients.



Recreational Water

Each month DCHD samples 18 stream sites throughout the county. In addition, 12 ponds & recreational waters are sampled during summer months.

In 2011 a joint effort between the USGS, DEQ & the DCHD began the Great Salt Lake Baseline Sampling Program. DCHD samples 2 locations on the Great Salt Lake 2 times per year for water contaminants.

Hazardous Waste Management

In 2012, 27 hazardous material releases occurred in Davis County that were reported to the 24/7 reporting hotline managed by the DEQ. The DCHD investigated 12 illicit discharges that impacted water quality and responded to 26 environmental emergencies including spills, illicit discharges, and other environmental emergencies.

Table 53: Hazardous Waste Management Indicators

Hazardous Waste Management	Davis	Utah	Source
# of Hazardous Material Releases (2012)	27	344	DEQ
# of Illicit Discharges Investigated (2012)	12	—	DCHD
# of Environmental Emergencies Responded to by DCHD (2012)	26	—	DCHD
# of Superfund Sites (2013)	4	20	DCHD
# of Homes Short-Term Tested for Radon	2,573	30,162	UDEQ
Radon pCi/L (Average Levels/Short-Term Test)	4.4	5.3	DEQ

Superfund Sites

In Davis County, there are 4 Superfund sites. A Superfund site is an uncontrolled or abandoned place where hazardous waste is located, possibly affecting local ecosystems or people.²³

- Bountiful/Woods Cross 5th South PCE Plume—Clean up underway
- Five Points PCE Plume, Woods Cross—Study underway
- Intermountain Waste Oil Refinery, Bountiful—Clean up activities complete
- Hill Air Force Base—Clean up underway

Radon

The EPA estimates about 21,000 lung cancer deaths each year in the U.S. are radon related. Exposure to radon is the number one cause of lung cancer among non-smokers and the second leading cause of lung cancer overall. Those who smoke and are exposed to radon have an especially high risk of developing lung cancer.

Testing homes for radon levels is the only way to know if people in a home are at risk from radon. Since 2008, 2,573 homes in Davis County have conducted short-term radon tests that were reported to the DEQ. The average measure of radon was 4.4 pCi/L, which is lower than the average state measure of 5.3 pCi/L. If a home radon test result measures 4 pCi/L or higher, the EPA recommends taking action. A mitigation system may be installed. The DCHD is now actively testing homes for radon.

Waste Management

Davis County residents say they enjoy good sewer, sanitation & waste management, safe restaurants, safe water supply, safe neighborhoods & good roads.

~2012 Focus Groups

Some residents are concerned about ground pollution/plumes, mostly from Hill Air Force Base, but also landfill/burn plant & refineries.

~2012 Key Informant Survey

Food Safety

Foodborne disease outbreaks sometimes result from failures in protective systems but are more often the result of improper food handling. Children, the very old, pregnant women, and people with weakened immune systems are at increased risk of infection and death resulting from food contamination.

Table 54: Food Safety Indicators

Food Safety	Davis
% of Inspected Food Service Facilities Needing Follow-Up Inspections	2.9%
Food Service Facility Closures	0
Foodborne Illness Complaints Filed with DCHD	32
Foodborne Outbreaks Tied to Local Food Service Facilities	0
Foodborne Disease Cases Tied to State/National Outbreaks (Lab Confirmed)	10

Source: DCHD, 2012

In 2012, 1,155 routine food service inspections were conducted. Of those, 2.9% (34) needed a follow-up inspection because the inspector determined the facility was at an elevated risk for foodborne illness. No facilities were closed for cause during an inspection or an investigation.

A total of 32 foodborne illness complaints were filed with the Davis County Health Department in 2012. However, there were no confirmed foodborne illness outbreaks linked to a Davis County food service facility.

Shiga toxin-producing E-coli, Salmonella, and Campylobacter bacteria are common causes of foodborne illnesses. They cause diarrheal illness in humans along with other symptoms. In some people infections can lead to hospitalization and even death. Infections are often acquired by eating or drinking food contaminated with bacteria. Illness may also be spread by direct contact with an infected person or animal. Davis County rates of these illnesses are included in the communicable disease section of this report.

Norovirus is transmitted primarily by consumption of fecally contaminated food/water or by direct person-to-person contact. The CDC estimates 23 million cases of stomach/intestinal illness are due to norovirus infection each year and at least 50% of all foodborne outbreaks can be attributed to noroviruses. Due to the fairly short duration of illness and self-limited/mild/moderate symptoms, persons infected with norovirus often don't seek medical attention. Those who do are rarely tested, so many norovirus outbreaks are missed.

Food Safety

Foodborne disease outbreaks often result from improper food handling.

There were no Davis County food service facilities closed for cause during an inspection or an investigation in 2012.

“In general, food service facilities throughout Davis County are in very good condition & are safe for patrons to visit.”

~Davis County Food Service Inspector

Food Environment

Early food environment research provides strong evidence that access to fast food restaurants and limited access to healthy foods correlate with a high prevalence of overweight, obesity, and premature death. Supermarkets traditionally provide healthier options than convenience or corner stores. Limited access to fresh fruits and vegetables is a barrier to healthy eating and is related to premature mortality. Among children, fast food restaurants are the second highest energy provider, second only to grocery stores. Environments with a large proportion of fast food restaurants have been associated with higher obesity and diabetes levels.

Table 55: Food Environment Indicators

Food Environment	Davis	Utah	U.S.	Source
Grocery Store Access* (2010)	7.8	13.1	21.8	CHNA.org
WIC-Authorized Food Store Access* (2012)	8.6	11.0	15.6	CHNA.org
Limited Access to Healthy Foods** (2012)	4.0%	5.0%	8.0%	CHR
Fast Food Restaurants (2010)	63.0%	59.0%	45.0%	CHR

*Rate per 100,000 Population **Data should not be compared with prior years due to changes in definition.

There are 7.8 grocery stores per 100,000 population in Davis County, which is lower than the rate for Utah (13.1) and the U.S. (21.8). Grocery stores are defined as supermarkets and smaller grocery stores primarily engaged in retailing a general line of food, such as canned and frozen foods; fresh fruits and vegetables; and fresh and prepared meats, fish, and poultry. Convenience stores, large general merchandise stores, supercenters, and warehouse club stores are excluded. There is a correlation between obesity rates and the number of grocery stores. The CDC recommends 1 full service grocery store per 10,000 residents. Davis county is below that with .78 per 10,000.

Davis County has 8.6 food stores and other retail establishments per 100,000 population that are authorized to accept WIC Program benefits and that carry designated WIC foods and food categories. This indicator provides a measure of food security and healthy food access for women and children in poverty as well as environmental influences on dietary behaviors. Davis County has fewer establishments compared to the state and nation.

The proportion of the population who are low income and do not live close to a grocery store is 4% in Davis County and 5% in Utah who have limited access to healthy foods. Living close to a grocery store is defined differently in rural and nonrural areas (in nonrural areas, it means less than 1 mile; in rural areas it means less than 10 miles). Low income is defined as having an annual family income of less than or equal to 200% of the federal poverty threshold for the family size.

In Davis County, 63% of all restaurants are fast-food establishments, which is higher than the state and U.S. This measure does not take into account how much food is consumed, how healthy food is, how individuals or families visit fast food restaurants, or the proximity of these restaurants to schools, which could encourage unhealthy eating in children.

Food Environment

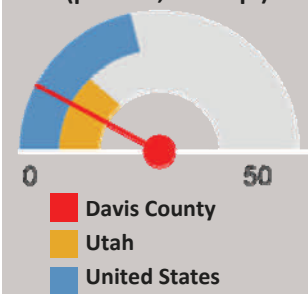
In 3 out of 4 indicators related to food environment, Davis County is worse compared to the state.

“Our school is surrounded by fast food restaurants!”

~Davis County Resident

There are 7.8 grocery stores per 100,000 residents in the county.

Graph 33: Grocery Store Access Comparison Scale Establishment Rate (per 100,000 Pop.)



Source: CHNA.org

Parks & Recreation

Access to places for recreation is associated with higher rates of physical activity and lower rates of obesity. Access to parks and recreation facilities encourages physical activity and other healthy behaviors. The evidence for the effectiveness of improving access to recreational facilities is so strong that the CDC recommends it as one of the 24 environmental and policy strategies to reduce obesity.

Table 56: Park & Recreational Facility Access Indicators

Active Living Environment (2010)	Davis	Utah	U.S.
Access to Recreational Facilities, per 100,000 Population	9.1	7.0	7.6
% of Population that lives within 1/2 Mile of a Park	67%	54%	—

Source: CHR, 2013

Davis County has 9.1 recreational facilities per 100,000 population. According to the CHR, recreational facilities are establishments primarily engaged in operating fitness and recreational sports, featuring exercise and other active physical fitness conditioning or recreational sports activities such as swimming, skating, or racquet sports.

In Davis County, 67% of residents live within ½ mile of the boundary of a park. This is better than the Utah average of 54%. A measure of parks per square mile for each city is in the table below. These measures are in the early stages of development and application. The number of parks in this table doesn't reflect park acreage or developed parks/acres per population.

Table 57: Parks by City

Davis County Park Summary 2013			
City	# of Parks	# of Square Miles	Parks Per Square Mile
Bountiful	13	13.2	0.98
Centerville	5	6	0.83
Clearfield	13	7.7	1.69
Clinton	8	5.9	1.36
Farmington	17	10	1.70
Fruit Heights	4	2.3	1.74
Kaysville	11	10.5	1.05
Layton	12	22	0.55
North Salt Lake	7	8.6	0.81
South Weber	12	4.7	2.55
Sunset	3	1.5	2.00
Syracuse	12	9.4	1.28
West Bountiful	1	3.3	0.30
West Point	3	7.2	0.42
Woods Cross	2	3.8	0.53
Unincorporated	1	29.6	0.03
Total	124	145.7	0.85

Source: DCHD, 2012

Active Living

67% of Davis County residents live within ½ mile of the boundary of a park.

Improving access to recreational facilities is an effective environmental/policy strategy to reduce obesity.

“There are so many recreational options that make it an easy place to get exercise.”

~Davis County Resident

Sidewalks & Trails

Sidewalks

Only 7% of Davis County residents report that there are no sidewalks in their neighborhood. This is the lowest rate (best) among Utah’s 12 local health districts. Statewide, 18% of residents report no sidewalks. While most residents have sidewalks, 41% of residents in Davis County would like more sidewalks.²⁴

Trails

In 2013, the DCHD conducted a comprehensive health resource assessment that included gathering information about trails throughout the county. More than 540 miles of trails exist.

Table 58: Davis County Trails

Davis County Trails					
City	Bike Lane Miles	Paved Shared Trail Miles	Gold Medal Miles	Hiking Trail Miles	Trail Heads
Bountiful*	4.5	2.5	0	48	7
Centerville*	5	9.7	1	33.3	12
Clearfield*	0	6.76	1	0	6
Clinton*	0	5.5	1	0	0
Farmington*	16.8	60	0	119	36
Fruit Heights*	1.26	3.5	0	13.4	4
Kaysville*	1.7	20.43	1	2	17
Layton*	5.7	8.4	1	13	6
North Salt Lake*	3.5	9.4	0	4.5	3
South Weber*	6	1	0	1	1
Sunset	0	0	1	0	0
Syracuse	1.2	6	0	0	16
West Bountiful*	2.7	7.25	0	0	6
West Point*	0.5	3.6	0	0	3
Woods Cross*	1.5	6.3	0	1	2
Unincorporated	23.7	8	0	74.9	20
County Totals	74.06	158.34	6	310.10	139

*City records and county records sometimes differed. Indicator represents highest estimate. Source: DCHD, 2013

Definitions

- Bike Lanes: miles of on-street painted/striped lanes
- Paved Shared Trails: miles of paved walking, jogging, biking, and sometimes equestrian trails
- Gold Medal Miles: marked one-mile walking paths with beginning walkers in mind
- Hiking Trails: miles of natural surface mountain trails and lakeshore trails
- Trail Heads: number of designated starting points to enter trails system (may contain parking, restrooms, maps, and sign posts)

Trails

More than 540 miles of trails exist in Davis County.

Many residents believe Davis County is a healthy place to live because of the many outdoor activities including walking, biking, & hiking trails.

“I really like how there are so many trails & hiking options . . . trails that are all different levels of difficulty which is nice because I can do them with my kids.”

~Davis County Resident

Health Status Assessment Conclusion

The indicators presented have provided comprehensive, broad-based data from a variety of sources in an effort to identify health outcomes and health factors that describe the health status of Davis County's residents and environment. Collecting and analyzing data can be an overwhelming task. Hundreds if not thousands of indicators are available. This document contains sufficient data to understand the health status of Davis County residents. Health concerns identified by Davis County residents in the 2012 Key Informant Survey were particular areas of focus in this report.

Assessment efforts have helped identify areas where Davis County is doing well and those indicators where improvement is needed. The DCHD assessment efforts are ongoing and planned activities are often influenced by the latest data. However, a formal community health assessment such as this will be conducted every 3 to 5 years.

A complete and comprehensive community health assessment is necessary to keep the community moving toward action. The data should help public health agencies and partners focus on what is most important and act to improve those areas. In some cases additional information may be helpful to move toward improving health in the community. As priority areas are selected, it may be necessary to look at individual measures by age, gender, race/ethnicity, and/or ZIP code or census tract if possible. In some instances data for specific indicators was limited or not available including Alzheimer's Disease incidence, mental health incidence, utilization of mental health services, condom use, and air pollution (PM10).

Understanding Davis County's health status through examining health indicators is only one component of mobilizing the community to action. The second component to CHR is County Health Roadmaps, which provides tools to bring communities together from all sectors to look at the many factors that influence health, focus on strategies that are proven to work, learn from other communities' efforts, and make changes that will have a lasting impact on health as illustrated in the Take Action Cycle.

Take Action

Understanding Davis County's health status through examining the indicators is only one component of mobilizing the community to improve health.



DCHD Community Health Assessments

In addition to the health status information included in this report, other community health assessments have been conducted by the DCHD over the last several years. They are summarized on the following pages.

City Health Policy & Resource Assessment, 2013

A 2 part effort was used to assess county health policies and resources at the city level. An Internet scan was conducted to gather as much information as possible about health resources in Davis County. The second phase involved in-person meetings with officials from the county's 15 cities.

Cities are important partners in contributing to and promoting health throughout the county. Each city was asked about policies and resources in areas of active living, healthy eating, safe communities, environment (water, waste, and air), and other programs and policies directly or indirectly related to health. It was a valuable opportunity to learn about health resources available throughout the county and policies in place that affect health. The information provides a better understanding of community strengths and themes and will help to identify resource-poor areas. Knowing the priorities of each city and being aware of their plans allows for better coordination of efforts and future collaboration opportunities. The information adds more community voice to assessment efforts as city officials were able to describe their city, share ideas, and ask questions.

A comprehensive list of city resources by category has been created. Future plans include developing a resource locator so that all the information is readily available online for the public to search, map, and access. Below is a list of categories that would be included.

- Bowling
- Boys & Girls Clubs
- Breastfeeding Support
- Bus Routes/Lines/Front Runner Stops
- Car Seat Check Fitting Stations
- Community Gardens
- Community Health Clinics
- Crime-Free Housing
- Farms/Farmers Markets
- Food Banks
- Fun-Parks/Amusement
 - Trampoline Park
- Golf Courses
- Grocery Stores
 - Organic/Gluten-Free
 - WIC
- Gyms/Fitness
- Gymnastics/Dance/Cheer Facilities
- Health Department (WIC, Immunization clinics, Baby Your Baby, Weatherization, Diesel Testing Center)
- Hospitals
- Ice Skating
- Indoor Soccer Facilities
- Martial Arts Studios
- Mental Health Services
- Park & Ride Lots
- Parks
 - Dog Parks
 - Skate Parks
- Recreation Centers
- Recycling
 - Curbside
 - Green Waste
 - E-Waste
 - Household Hazardous
 - Pharmaceutical
 - Paper Dumpsters
- Senior Centers
- Skate Parks
- Sports Specialty Shops
 - Running
 - Ski/Snowboard Rentals
 - Bike Shops
- Tennis Courts
- Trails
 - Gold Medal Miles
 - Trail Heads
 - Hiking Trails
 - Paved Shared Trails
 - Walking Tracks
 - Bicycle Lanes
- USU Extension
- Water Recreation
 - Swimming Pools
 - Splash Pads
 - Ponds
 - Lakes
 - Reservoirs
- Weight-Loss Centers

Many other community resources are available throughout the county and can be found by accessing the 211 Davis County Area General Resource List found at: <http://www.uw.org/211/find-help/resources-by-county/davis-general-resource-list.pdf>.

DCHD Community Health Assessments

City Highlights

Each city was found to have health resources and policies in place that directly or indirectly influence health. The following pages are a sampling of what was learned through the city health policy and resources assessment. Several highlights are provided for each city.

Bountiful

- South Davis Recreation Center (ice rink, pools, sports, sports courts, fitness equipment, classes, recreation programs, races, etc.)
- Entrance to the U.S. Forest Service
- Walkable Downtown
- Farmers Market
- Community Garden
- Golden Years Senior Activity Center
- Bountiful Pond
- Landfill/Recycling Facility
- Bonneville Shoreline Trail
- Communities that Care Coalition
- Bountiful Ridge Golf Course

Centerville

- Super Block (connection of walkways through residential and commercial part of town)
- Best Drinking Water in Utah
- Legacy Parkway Trail
- D & RGW Rail Trail
- Bonneville Shoreline Trail
- Farmers Market
- Community Garden
- Recreation Program including Wellness Contests & Family Activities
- Parks & Trails Guide
- Curbside Green-Waste Recycling
- CenterPoint Legacy Theatre
- Tree City Designation

Clearfield

- Clearfield Aquatic Center
- Recreation Programs for All Ages
- Community Garden
- Good Landlord Program
- D & RGW Rail Trail
- Canal Trail
- Steed & Mabey Ponds
- North Davis Senior Activity Center

Clinton

- Crane Field Golf Course
- Community Garden
- D & RGW Rail Trail (plowed during winter months)
- Community Enhancement Committee
- Clinton City Pond

DCHD Community Health Assessments

City Highlights

Farmington

- Extensive Trail Network (119 miles of trail & 36 trail heads, 2nd most trails for a Utah city next to Moab)
- City Trail Guide Book
- D & RGW Rail Trail
- Legacy Parkway Trail
- Bonneville Shoreline Trail
- Emigrant Trail
- Entrance to U.S. Forest Service
- Oakridge Country Club Golf Course
- Access to Great Salt Lake
- Great Salt Lake Bird Refuge
- City Swimming Pool
- Lagoon Amusement Park
- Legacy Events Center
- Farmington Pond
- Youth Theatre Program

Fruit Heights

- Orchards & Farmers Market
- Curbside Green-Waste Recycling
- Bair Gutsman Mountain Run
- Low Crime/Safe City

Kaysville

- Curbside Green-Waste Recycling
- D & RGW Rail Trail
- Emigrant Trail
- Free Public Splash Pad
- Sportsplex
- Wilderness Park
- Cherry Hill Water Park
- Davis Park Golf Course
- Utah State University Extension (Farmers Market, Botanical Center & Ponds, Gardening Classes)
- Regular Community/Family Events
- Autumn Glow Senior Activity Center
- Davis Applied Technology College

Layton

- D & RGW Rail Trail
- Victims Advocate Program
- Farmers Markets
- Produce Stands
- Community Garden
- Crime-Free Housing Program
- Layton Surf-N-Swim
- Free Public Splash Pad
- Andy Adams Pond
- Sun Hills, Swan Lakes & Valley View Golf Courses
- Hobbs & Holmes Reservoirs
- Family Recreation Department with Monthly Family Activity Night
- Communities that Care Coalition
- Landfill/Recycling Facility
- Layton Marathon (Olympic Qualifier)
- Trail System Connects Mountains & the Great Salt Lake from East to West
- Weber State University Davis Campus

DCHD Community Health Assessments

City Highlights

North Salt Lake

- Legacy Parkway Trail
- Community Garden
- Free Public Splash Pad
- Good Landlord Program
- City Safety Committee
- Uniting Neighbors Committee
- Trails connect Davis County to Salt Lake County
- Eaglewood Golf Course

South Weber

- Family Activity Center
- Bonneville Shoreline Trail
- Farmers Market

Sunset

- Home of Sunset Sam (Sunset Sam is a guinea pig. Equivalent to a Groundhog Day weather predictor.)
- Small City (only 1.5 square miles)
- Curbside Green-Waste Recycling

Syracuse

- Release Time Policy for City Employee Exercise
- Community Center with Indoor Walking Track & Fitness Equipment (low cost to residents)
- Suicide Prevention Program
- Emigrant Trail
- Farmers Market
- Curbside Green-Waste Recycling
- Energy Efficient Street Lights
- Jensen Nature Pond
- Big Idea Contest
- Glen Eagle Golf Course

West Bountiful

- 4 Trail Heads to Legacy Parkway Trail
- D & RGW Rail Trail
- Lakeside Golf Course
- Emergency Preparedness for all City Employees
- Solar Panels on City Building

West Point

- Emigrant Trail
- Curbside Green-waste Recycling
- Rural Feel/Green Space
- Safe Community
- Youth Recreation Program
- Schneiter's Bluff Golf Course

Woods Cross

- Community of Promise (Activities for Seniors & Gardening Program)
- Legacy Parkway Trail
- Curbside Green-Waste Recycling
- Air Quality Committee

DCHD Community Health Assessments

Local Health Department Profile, 2013

NACCHO's National Profile of Local Health Departments (LHD) study is a comprehensive look at local public health infrastructure and practice. The DCHD gathered statistics on finance, workforce, and public health activities. Local data is used to describe current LHD infrastructure and practice, can be used to make local and regional comparisons, drive policymaking, and conduct research on local public health practice.



Low-Income Family Focus Groups, 2012

Three focus groups were conducted with participants from the Davis Community Learning Center and Head Start, most of whom represented low-income families in Davis County. The focus groups were designed to help us understand factors that affect the health of families who struggle financially. The information gathered in these focus groups is being used to assess health needs, gain understanding of community values, identify unique issues, and guide future planning efforts. The information provided a community perspective to assessment efforts. Low-income individuals and families worry about day-to-day problems. Their main health concerns are things that affect their daily life such as childhood illnesses, insects, and the taste of their drinking water. They regularly experience housing problems, use tobacco at much higher rates than the general population, and generally agree that access to healthy food and physical activity opportunities are not a problem in Davis County.

Key Informant Survey, 2012

An online key informant survey was conducted during November and December of 2012. Key informant survey results are an important part of assessment efforts in Davis County. It is qualitative data that gives context to health indicators and provides understanding about the health culture in the community. It is a survey of informed opinions about the health needs and resources in the county. Forty-three different agencies and groups considered public health partners and community leaders were invited to participate. Engaging with the community in this way provides valuable information about the perceptions and priorities of the population. It provides information about community strengths and themes. It contributes community voice to assessment efforts. Finished surveys were received from 340 residents in every city and across many professional sectors. Survey participants repeatedly mentioned air quality and obesity as primary health concerns. Word clouds such as the one below are used to display findings.

In your opinion, what forces are working AGAINST good health in Davis County?



DCHD Community Health Assessments

Public Health Preparedness Assessment, 2011

During the past 10 years the DCHD has made large improvements to emergency preparedness plans and efforts. The introduction of the CDC Public Health Preparedness Capabilities document provides the DCHD with a valuable tool to continue assessing levels of preparedness, identifying necessary staff training, and improving preparedness strategies. Strengths and next steps were identified for each of the 15 capabilities/6 content areas. Mutual aid agreements exist between all 12 LHDs in the state, intended to facilitate the provision and allocation of resources

and to minimize liability in a public health emergency.

Memorandums of understanding are in place with key partners including Davis School District, Church of Jesus Christ of Latter Day Saints, and Legacy Events Center, which allow use of their facilities in a public health emergency. As part of the County Citizen Corps Council, the DCHD coordinates a Medical Reserve Corps (MRC) unit with over 450 volunteers who have received training and are familiar with Incident Command System (ICS). The DCHD will continue to work with partner agencies to move preparedness efforts forward.



Environmental Health Assessment, 2011

This document provides a summary of the services and accomplishments of the Environmental Health Services Division and includes information about how programs have changed over time to meet the demands of today. Inspection and sampling results are presented for air, water, food, and waste. Environmental response capabilities are outlined.

Healthcare Assessment, 2011

This survey of the healthcare community was intended to gather qualitative data from providers and administrators. The purpose of the survey was to identify what the perception of public health is in the county in an effort to identify opportunities for partnerships between acute care and public health in order to better serve the population in Davis County. The chosen facilities were selected because they were deemed to be the major players in the county when it came to the interaction between public health and acute care. They included Davis Hospital and Medical Center (Layton, UT), Lakeview Hospital (Bountiful, UT), South Davis Community Hospital (Bountiful, UT), Tanner Clinic (Kaysville, UT), Tanner Clinic (Layton, UT), Intermountain Bountiful Clinic (Bountiful, UT), Intermountain Layton Clinic (Layton, UT), Intermountain Syracuse Clinic (Syracuse, UT), and Midtown Community Health Center (Clearfield, UT).

Annual Report, 2012

This report contains a year-end summary of the department's accomplishments. It highlights new facilities, training, programs, activities, and events. It is available online at: http://www.co.davis.ut.us/documents/health/annual_report/DCHD_2012_Annual_Report.pdf

Mobilizing for Action through Planning and Partnerships (MAPP) is a community-driven strategic planning process for improving community health. Facilitated by public health leaders, this framework helps communities apply strategic thinking to prioritize public health issues and identify resources to address them. MAPP is not an agency-focused assessment process; rather, it is an interactive process that can improve the efficiency, effectiveness, and ultimately the performance of local public health systems.²⁵

MAPP brings 4 assessments together to drive the development of a community strategic plan. Four unique and comprehensive assessments gather information to drive the identification of strategic issues.

- The **Community Themes and Strengths Assessment** identifies themes that interest and engage the community, perceptions about quality of life, and community assets. The Davis County Key Informant Survey was the primary tool to identify community themes and strengths. Additional information from the 2012 focus groups also contributes to this assessment. Copies of these reports are available upon request. Meeting with administrators from all 15 cities to conduct a city health policy and resource assessment also added valuable information to what we know about county themes and strengths.
- The **Local Public Health System Assessment** measures the capacity of the local public health system to conduct essential public health services. The DCHD would like to initiate a public health system assessment in the coming year.
- The **Community Health Status Assessment** analyzes data about health status, quality of life, and risk factors in the community. The Davis County Community Health Status Assessment (this document) contains a comprehensive description of county demographics and reviews health indicators and measures in the following categories: mortality, morbidity, health behaviors, clinical care, social and economic factors, and the physical environment.
- The **Forces of Change Assessment** identifies forces that are occurring or will occur that will affect the community or the local public health system. Some forces of change information has come from the Key Informant Survey. Additional information for this assessment will come through conducting a SWOT analysis and the Local Public Health System Assessment in the near future.



Policies

Policies implemented at the local, state, and federal levels can have an impact on population health in a variety of ways. Policies may be designed to target health outcomes directly or by tackling the variety of factors that determine those outcomes. They can focus on downstream factors, such as ensuring children are immunized at appropriate times or changing individuals' diet and exercise behaviors. Or they can focus on more upstream factors, such as encouraging college attendance or stimulating economic development.²⁶

As the community mobilizes, comes together to improve health, and begins working on priorities, it is critical that effective programs and policies are selected. Good community health policies create healthier places to live, learn, work, and play. Informed policies can improve health by making the healthy choice the easy choice for residents and by reducing barriers to achieve optimal health.

Policies affecting physical activity, access to healthy foods, and the prevalence of tobacco products in local neighborhoods can either promote or discourage healthy behaviors and outcomes. A policy scan/assessment has been conducted to find policies that influence behavior. Below are some of the policies at the city, county, and state levels that impact health in Davis County.

Utah Indoor Clean Air Act (UICAA)

In Utah, smoking is prohibited in all enclosed indoor places of public access, publicly owned buildings/offices, and private businesses. Utah passed the indoor smoking law in 1995 and it became even more comprehensive in 2007 to include bars and clubs. In 2012 the UICAA rule added new language to include heated tobacco, hookah, and e-cigarettes in the definition of smoking, and restricts the use of heated and ignited tobacco and e-cigarettes in indoor places of public access.

Smoke-Free Outdoor Public Places

In 2007, the Davis County Board of Health voted to adopt a comprehensive, countywide, outdoor smoke-free policy to protect public health. The regulation limits public exposure to second-hand smoke in outdoor areas of public gatherings including city parks, amusement parks, recreational areas, hiking trails, bike paths, playgrounds, swimming pools, wilderness areas, fishing ponds, bus stops, commuter rail stops, covered shelters, golf course areas, ball parks, ticket lines, ATMs, outdoor events, outdoor eating areas, plazas, fair grounds, concession stands, boweries, cemeteries, amphitheaters, bleachers, public restroom facilities, public gardens, and skate parks throughout Davis County.

Hookah

On August 10, 2010 the Davis County Board of Health issued a policy directive stating that hookah smoking in commercial facilities violates the Utah Indoor Clean Air Act (UICAA). This policy directive alerts cities to not issue permits for hookah establishments because county health officials consider them illegal for commercial facilities. This is a proactive move to discourage business owners from starting shops that would then have to be shut down when the UICAA is modified to include language that would prohibit these devices from being smoked in an indoor establishment.

Tanning

In 2006, the DCHD became the first local health department to adopt a regulation for tanning facilities to protect the public's health, safety, and welfare and to decrease the incidence of skin cancer. The Board of Health regulation required parental permission for minors to tan. The state of Utah recently passed a similar law and Davis County now follows state law tanning restrictions for minors.

Policies

Human Sexuality Instruction

Davis County educators and health professionals abide by Utah state law when addressing sex education for school-age children. Utah is considered an “abstinence-based” state. The following points are contained in the law. All instruction related to human sexuality and/or sexual activity will take place within the context of Utah State Law (53A-13-101) and Utah State Board of Education rule (R277-474) as follows:

- The public schools will teach sexual abstinence before marriage and fidelity after marriage.
- There will be prior parental consent before teaching any aspect of contraception and/or condoms.
- Students will learn about communicable diseases, including those transmitted sexually, and HIV/AIDS.

The following are NOT approved by the State Board of Education for instruction and may not be taught:

- The intricacies of intercourse, sexual stimulation, or erotic behavior;
- The advocacy of homosexuality;
- The advocacy or encouragement of the use of contraceptive methods or devices;
- The advocacy of sexual activity outside of marriage.

In accordance with Utah State Board of Education Rule R277-474-6-D, teachers may respond to spontaneous student questions for the purposes of providing accurate data or correcting inaccurate or misleading information or comments made by students in class regarding human sexuality.

In 2012 Utah legislators passed a bill to replace a current law that would have allowed school districts to drop sex education entirely or require teaching abstinence only should they keep it. The governor later vetoed the bill.

City Ordinances/Policies

During the city health policy and resource assessment several types of health policies and programs were found at the city level that influence health directly or indirectly.

- Safe Housing: Clearfield and North Salt Lake have Good Landlord ordinances that include financial incentives for participation. Layton has a Crime-Free Housing Program.
- Suicide: Syracuse is a partner in N.U.HOPE, an evidence-based suicide prevention collaborative.
- Tobacco Specialty Shops: Clearfield, Kaysville, and Layton have adopted ordinances that limit tobacco specialty shops (smoke-shops) in their cities.
- Vehicle Idling: Syracuse has a no-idling policy for city vehicles. Centerville has a grant to reconstruct a busy intersection to alleviate vehicle congestion and idling.

The information in this health status assessment can be used to create and implement evidence-informed programs and policies that improve community health. Understanding county health indicators is important, but it is also critical to take action toward improving community health by identifying effective programs and policies that meet community needs.

Appendix

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1 Healthy People 2020 Targets—How Davis County Compares

Healthy People 2020 Indicators				
Health Indicator	Davis County			Healthy People 2020 Target
	Measure	Year	Source	
MORTALITY				
Chronic Disease Death Rates				
Coronary Heart Disease Deaths (Age-adjusted Death Rate per 100,000 Population)	72.5	2006–2010	DCCS	100.8
Stroke Deaths (Age-adjusted Death Rate per 100,000 Population)	30.9	2006–2010	DCCS	33.8
Prostate Cancer Deaths (Age-adjusted Death Rate per 100,000 Men)	24	2006–2010	DCCS	21.2
Diabetes (Underlying Cause) Deaths (Age-adjusted Death Rate per 100,000 Population)	22.1	2009–2011	IBIS, UDOH	65.8
Breast Cancer Deaths (Age-adjusted Death Rate per 100,000 Women)	20.3	2008–2010	DCCS	20.6
Lung Cancer Deaths (Age-adjusted Death Rate per 100,000 Population)	16	2006–2010	DCCS	45.5
Colorectal Cancer Deaths (Age-adjusted Death Rate per 100,000 Population)	10.5	2007–2010	DCCS	14.5
Melanoma of the Skin Deaths (Age-adjusted Death Rate per 100,000 Population)	2.1	2005–2010	DCCS	2.4
Injury Deaths				
Unintentional Injury Deaths (Age-adjusted Death Rate per 100,000 Population)	29.6	2007–2009	IBIS, UDOH	36
Poisoning Deaths (Age-adjusted Death Rate per 100,000 Population)	17.4	2006–2010	DCCS, UDOH	13.1
Suicide (Age-adjusted Death Rate per 100,000 Population)	15.1	2006–2010	DCCS, UDOH	10.2
Motor Vehicle Traffic Crash Deaths (Age-adjusted Death Rate per 100,000 Population)	6.8	2008–2010	DCCS, UDOH	12.4
Infant/Child Mortality				
Infant Mortality (Deaths per 1,000 Live Births)	5.3	2006–2009	DCCS, UDOH	6
MORBIDITY				
Birth Outcomes				
Low Birth Weight (Percentage of Live Born Infants)	6.8%	2008–2010	DCCS, UDOH	7.8%
Births from Unintended Pregnancies (% of Women with Live Births)	28.0%	2008–2010	IBIS, UDOH	56.0%
Birth Rate for Females Aged 15–19 (Rate per 1,000 Adolescents Females)	20.2	2010	DCCS, UDOH	36.2

Red text highlights measures where Davis County is not meeting the Healthy People 2020 target.

1 Healthy People 2020 Targets—How Davis County Compares

Healthy People 2020 Indicators				
Health Indicator	Davis County			Healthy People 2020 Target
	Measure	Year	Source	
MORBIDITY				
Chronic Disease Prevalence				
Doctor-Diagnosed High Blood Cholesterol (Age-adjusted Percentage of Adults)	27.3%	2009 & 2011	DCCS, UDOH	13.5%
Doctor-Diagnosed Hypertension (Age-adjusted Percentage of Adults)	25.4%	2009 & 2011	DCCS, UDOH	26.9%
Arthritis Prevalence (Age-adjusted Percentage of Adults)	22.0%	2011	IBIS, UDOH	35.5%
Percentage of Utah Adults With Diabetes (Age-adjusted Percentage of Adults)	6.5%	2009–2011	DCCS, UDOH	7.2%
Obesity				
Percentage of Adults Aged 18+ Who Were Obese (Age-adjusted Percentage of Adults Aged 18+)	24.9%	2009–2011	DCCS, UDOH	30.5%
Percentage of Adolescents, Aged 12–17, Who Were Obese (Percentage of Adolescents)	5.1%	2011	DCCS, UDOH	16.1%
Grade School Obesity, (Ages 6–11 BMI ≥ 95th percentile for age & gender)	9.4% (UT)	2012	PANO, UDOH	15.7%
Childhood Obesity, (Age 5 & under BMI ≥ 95th percentile for age & gender)	6.1% (WIC Clients)	2010	DCHD	9.6%
Communicable Diseases				
Number of Reported Shiga Toxin-Producing E.coli 0157:H7 (Reported Cases per 100,000 population)	1.89	2012	DCHD	0.6
Reported Salmonella Infections (Reported cases per 100,000 population)	11	2005–2011	DCCS, UDOH	11.4
Campylobacteriosis (Reported cases per 100,000 population)	6.7	2011	DCHD	8.5
Oral Health Conditions				
Prevalence of Dental Caries/Cavities, Ages 6–9	51.7% (UT)	2010	OHP, UDOH	49.0%
Untreated Decay, Ages 6–9	17.0% (UT)	2010	OHP, UDOH	25.9%
HEALTH BEHAVIORS				
Tobacco, Alcohol, & Drug Use				
Current Cigarette Smoking, Adults (Age-adjusted Percentage of Adults)	9.5%	2012	TPCP, UDOH	12.0%
Current Cigarette Smoking, Students Grades 9–12 (Percentage of Students)	4.4%	2012	TPCP, UDOH	21.0%
Binge Drinking in the Past 30 Days, Adults (Age-adjusted Percentage of Adults)	9.0%	2011	DCCS, UDOH	24.4%
Students, Grades 8, 10, 12, Who Used Alcohol in the Past 30 Days (Percentage of Students Reporting Alcohol Use)	10.3%	2011	DCCS, UDOH	16.6%

Red text highlights measures where Davis County is not meeting the Healthy People 2020 target.


1 Healthy People 2020 Targets—How Davis County Compares

Healthy People 2020 Indicators				
Health Indicator	Davis County			Healthy People 2020 Target
	Measure	Year	Source	
HEALTH BEHAVIORS				
Students, Grades 8, 10, 12, Who Use Marijuana in the Past 30 Days (Percentage of Students Reporting Marijuana Use)	5.8%	2011	DCCS, UDOH	6.0%
Excessive Drinking, Adults (Percent of Adults that report either binge drinking in the last 30 days, or daily heavy drinking)	8.0%	2012	CHR	25.4%
Physical Activity				
Recommended Physical Activity, Adults (Age-adjusted Percentage of Adults)	57.7%	2011	DCCS, UDOH	47.9%
Safety				
Always Wear Seatbelt (Age-adjusted Percentage of Adults 18+)	84.1%	2011	BRFSS, UDOH	92.0%
Reported Sun Safety Practice (Age-adjusted Percentage of Adults 18+)	64.1%	2006, 2008, 2010	DCCS, UDOH	80.1%
Prenatal Care in the First Trimester of Pregnancy (Percentage of Mothers)	78.8%	2009–2010	DCCS, UDOH	77.9%
CLINICAL CARE				
Mammogram Within the Past Two Years (Age-adjusted Percentage of Women Age 40+)	61%	2012	CHR	81.1%
Recommended Colorectal Cancer Screening (Age-adjusted Percentage of Adults Age 50+)	68%	2010	DCCS, UDOH	71.0%
At least 2 Hemoglobin A1C Tests in the Past 12 Months (Age-adjusted Percentage of Adults with Diabetes)	69.1	2009–2011	DCCS, UDOH	71.1%
Adults Ever Receiving Pneumococcal Vaccination (Percentage of Adults Aged 65+)	75.10%	2011	DCCS, UDOH	90.0%
Children Adequately Immunized at Kindergarten Entry	93.90%	2011	UDOH	95.0%
SOCIAL & ECONOMIC				
Education				
High School Graduation* (Percent of ninth grade cohort that graduates in 4 years)	82%	2010–2011	CHR	82.4%
Community Safety				
Homicide Rate (Deaths per 100,000 Population)	1	2004–2010	CHR	5.5

* Data should not be compared with prior years due to change in definition.

Red text highlights measures where Davis County is not meeting the Healthy People 2020 target.

2 Davis County Snapshot, County Health Rankings 2013

					
	Davis County	Error Margin	Utah	National Benchmark*	Rank (out of 27)
Health Outcomes					6
Mortality					7
Premature death	5,264	4,975–5,553	5,869	5,317	
Morbidity					8
Poor or fair health	10%	9–12%	13%	10%	
Poor physical health days	3.2	2.9–3.5	3.4	2.6	
Poor mental health days	3	2.8–3.3	3.2	2.3	
Low birthweight	6.90%	6.7–7.2%	6.80%	6.00%	
Health Factors					4
Health Behaviors					5
Adult smoking	7%	6–8%	10%	13%	
Adult obesity	25%	23–27%	25%	25%	
Physical inactivity	16%	14–17%	18%	21%	
Excessive drinking	8%	7–9%	9%	7%	
Motor vehicle crash death rate	7	6–8%	11	10	
Sexually transmitted infections	227		242	92	
Teen birth rate	25	24–26	32	21	
Clinical Care					2
Uninsured	12%	10–13%	17%	11%	
Primary care physicians**	2,138:1		1,795:1	1,067:1	
Dentists**	1,673:1		1,572:1	1,516:1	
Preventable hospital stays	34	31–37	37	47	
Diabetic screening	85%	80–89%	84%	90%	
Mammography screening	61%	56–65%	61%	73%	
Social & Economic Factors					4
High school graduation**	82%		76%		
Some college	75%	73–77%	67%	70%	
Unemployment	6.20%		6.70%	5.00%	
Children in poverty	10%	8–13%	16%	14%	
Inadequate social support	13%	12–15%	15%	14%	
Children in single-parent households	15%	14–17%	18%	20%	
Violent crime rate	108		217	66	
Physical Environment					13
Daily fine particulate matter	9.4	9.3–9.6	9.4	8.8	
Drinking water safety	17%		13%	0%	
Access to recreational facilities	9		7	16	
Limited access to healthy foods**	4%		5%	1%	
Fast food restaurants	63%		59%	27%	

* 90th percentile, i.e., only 10% are better

** Data should not be compared with prior years due to changes in definition

All health measures, interactive maps, and trend graphs can be found at www.countyhealthrankings.org.

2 Additional Measures Davis County, County Health Rankings 2013

	Davis County	Utah
County Health Rankings & Roadmaps A Healthier Nation, County by County		
Demographics		
Population	311,811	2,817,222
% below 18 years of age	34%	31%
% 65 and older	8%	9%
% Non-Hispanic African American	1%	1%
% American Indian and Alaskan Native	1%	1%
% Asian	2%	2%
% Native Hawaiian/Other Pacific Islander	1%	1%
% Hispanic	9%	13%
% Non-Hispanic white	86%	80%
% not proficient in English	1%	3%
% Females	50%	50%
% Rural	1%	9%
Health Outcomes		
Diabetes	6%	7%
HIV prevalence rate	49	108
Premature age-adjusted mortality	252	287
Infant mortality	535	521
Child mortality	51	53
Health Care		
Mental health providers	6,035:1	2,994:1
Health care costs	\$8,631	\$8,710
Uninsured adults	14%	20%
Uninsured children	8%	11%
Could not see doctor due to cost	10%	13%
Social & Economic Factors		
Median household income	\$68,974	\$55,802
High housing costs	29%	33%
Children eligible for free lunch	19%	31%
Homicide rate	1	2
Physical Environment		
Commuting alone	79%	76%
Access to parks	67%	54%

3 Utah Statewide Health Status Report, 2012

The Utah Statewide Health Status Report was developed to inform the State Health Improvement Plan (SHIP). It provides a summary of priority public health measures considered to be good indicators of the health status of Utah residents statewide and within the 12 LHDs. Local Health Officers and the Director of the UDOH were surveyed in July 2010 to identify statewide priorities. This report includes priority areas and indicators within them.

The bulk of the information for this report was drawn from the Indicator Reports on Utah's Indicator-Based Information System for Public Health (IBIS-PH) website and include LHD data and graphs where available. Healthy People 2020 (HP2020) objectives are included in the Indicators but only for those that exactly match the HP2020 objective. LHD Community Snapshots from IBIS-PH are also in this report.

For all indicators included in this report Davis County Health District was the same as the state average or better than the state average. Not one indicator was included where Davis was worse off than the state as a whole. (In this report, the assessment of whether a community is better or worse is based solely on the statistical difference between the community and state values.)

Compared to the rest of the state, Davis County is characterized by:

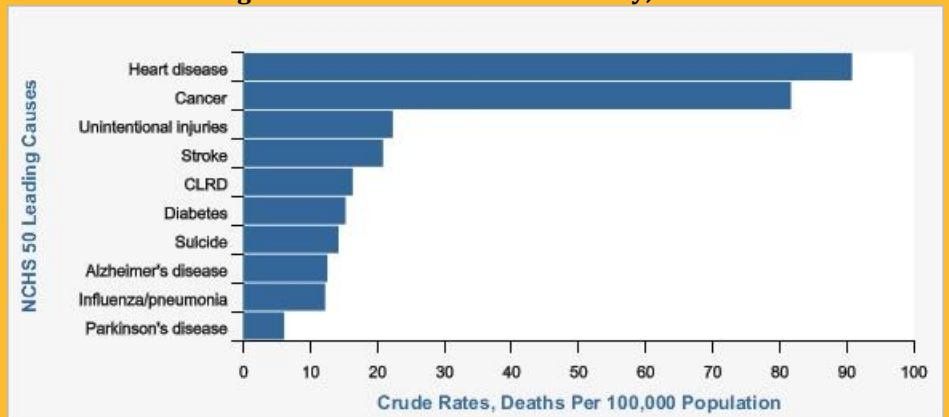
- higher median household income
- lower percentage of all people and children living in poverty
- higher percentage of mothers who received prenatal care in the first trimester
- lower birth rate for women aged 15–19
- lower percentage of adults who reported current cigarette smoking
- lower percentage of adolescents who were obese
- lower rate of stroke deaths
- lower rate of lung cancer deaths
- lower motor vehicle crash death rate
- lower percentage of adults who reported cost as a barrier to care in the past year
- lower percentage of people without health insurance coverage
- higher percentage of adults who reported a routine dental visit in the past year
- lower rate of asthma-related emergency department visits

The following Community Snapshot pages provide a summary table of indicators for each LHD and show where LHD measures differ from the overall state measure.

DAVIS COUNTY









Leading Causes of Death in Davis County, 2006–2010



Davis County Indicator Data	Page	Community Data		Comparison Values	
		Count/Rate	Compare	Utah	U.S.
UTAH'S SOCIO-DEMOGRAPHIC CONTEXT					
Birth Rate, 2010 (Number of Births per 1,000 Residents)	2	18.6	n/a	18.3	13.5
Life Expectancy at Birth, 2006–2010 (U.S. 2009) (Age in Years)	3	80.5	↕	80.4	78.5
Age Distribution 2010 (Percentage of Persons Aged 65+)	4	8.2%	n/a	9.0%	13.1%
Families With Children Under 18 That Were Headed by a Single Female (No Husband Present), 2010 (Percentage of All Households)	5	5.7%	n/a	5.5%	7.2%
Educational Attainment, 2006–2010 ACS 5-year estimate (Percentage of Utahns 25+ With Bachelor's Degree)	6	33.8%	--	29.4%	28.0%
Median Annual Household Income, 2010 (Dollars)	7	\$64,840	--	\$54,740	\$50,046
Persons Living in Poverty, 2006–2010 (Percentage of Persons)	8	6.5%	👍	10.8%	13.8%
Child Poverty, 2006–2010 (Percentage of Children)	9	8.0%	👍	12.3%	19.2%
Utah White Population, 2010 (Percentage of White Persons)	10	90.0%	n/a	86.1%	72.4%
ENVIRONMENTAL DETERMINANTS					
Number of Reported Shiga Toxin-Producing <i>E. coli</i> (STEC), 2005–2011 (Reported Cases per 100,000 population)	13	4.5	--	3.8	--
Reported <i>Salmonella</i> Infections, 2005–2011 (Reported cases per 100,000 population)	15	11.0	--	11.3	--
HEALTHY BEGINNINGS					
Prenatal Care in the First Trimester of Pregnancy, 2009–2010 (Percentage of Mothers)	26	78.8%	👍	72.3%	--
Infant Mortality, 2006–2010 (U.S. 2006–2009) (Deaths per 1,000 Live Births)	27	5.3	↕	5.0	6.6
Low Birth Weight, 2008–2010 (Percentage of Live Born Infants)	30	6.8%	↕	6.9%	8.2%
Birth Rate for Females Aged 15–19, 2008–2010 (Utah, 2010; U.S., 2009) (Rate per 1,000 Adolescent Females)	32	23.8	👍	27.6	39.1
HEALTH BEHAVIORS AND RISK FACTORS					
Current Cigarette Smoking, Adults, 2009–2011 (Age-adjusted Percentage of Adults)	39	7.9%	👍	11.3%	--
Current Cigarette Smoking, Students Grades 9–12, 2011 (Percentage of Students)	41	4.4%	↕	5.2%	--
Binge Drinking in the Past 30 Days, Adults, 2011 (Age-adjusted Percentage of Adults)	43	9.0%	↕	11.2%	--
Students, Grades 8,10,12, Who Used Alcohol in the Past 30 Days, 2011 (Percentage of Students reporting Alcohol Use)	45	10.3%	↕	11.2%	--

HEALTH BEHAVIORS AND RISK FACTORS (Continued)	Page	Count/Rate	Compare	Utah	U.S.
Students, Grades 8,10,12, Who Used Marijuana in the Past 30 Days, 2011 (Percentage of Students reporting Marijuana Use)	46	5.8%	↕	7.0%	--
Recommended Physical Activity, Adults, 2011 (Age-adjusted Percentage of Adults)	47	57.7%	↕	56.1%	--
Recommended Physical Activity, High Schoolers, 2005,2007,2009,2011 (Percentage of Adolescents)	48	47.2%	↕	48.9%	--
Percentage of Adults Aged 18+ Who Were Obese, 2009–2011 (Age-adjusted Percentage of Adults Aged 18+)	50	24.9%	↕	25.1%	--
Percentage of Adolescents Who Were Obese, 2011 (Percentage of Adolescents)	52	5.1%	👍	7.5%	--
Doctor-diagnosed High Blood Cholesterol, 2009 and 2011 (Age-adjusted Percentage of Adults)	54	27.3%	↕	25.4%	--
Doctor-diagnosed Hypertension, 2009 and 2011 (Age-adjusted Percentage of Adults)	56	25.4%	↕	25.6%	--
Recommended Colorectal Cancer Screening, 2010 (Age-adjusted Percentage of Adults Age 50+)	58	68.0%	↕	66.2%	--
Mammogram Within the Past Two Years, 2010–2011 (Age-adjusted Percentage of Women Age 40+)	60	66.5%	↕	65.3%	--
Reported Sun Safety Practice, 2006, 2008, 2010 (Age-adjusted Percentage of Adults 18+)	62	64.1%	↕	65.4%	--
CHRONIC DISEASES AND CONDITIONS					
Percentage of Utah Adults With Diabetes, 2009–2011 (Age-adjusted Percentage of Adults)	67	6.5%	↕	7.5%	--
Coronary Heart Disease Deaths, 2006–2010 (Age-adjusted Death Rate per 100,000 Population)	69	72.5	↕	70.1	--
Stroke Deaths, 2006–2010 (Age-adjusted Death Rate per 100,000 Population)	70	30.9	👍	36.1	--
Alzheimer's Disease Deaths, 2008–2010 (Age-adjusted Rate per 100,000 Population)	71	22.6	↕	19.6	--
Breast Cancer Deaths, 2008–2010 (Age-adjusted Death Rate per 100,000 Women)	72	20.3	↕	20.2	--
Colorectal Cancer Deaths, 2007–2010 (Age-adjusted Death Rate per 100,000 Population)	74	10.5	↕	11.6	--
Lung Cancer Deaths, 2006–2010 (Age-adjusted Death Rate per 100,000 Population)	76	16.0	👍	20.6	--
Melanoma of the Skin Deaths, 2005–2010 (Age-adjusted Death Rate per 100,000 Population)	78	2.1	--	--	--
Prostate Cancer Deaths, 2006–2010 (Age-adjusted Death Rate per 100,000 Men)	80	24.0	↕	24.3	--
Seven or More Days of Poor Mental Health in the Past 30 Days, 2011 (Age-adjusted Percentage of Adults)	81	13.8%	↕	15.8%	--
INJURY					
Fall Hospitalizations, 2010 (Age-adjusted Rate per 10,000 Population)	84	22.5	↕	22.4	--
Motor Vehicle Traffic Crash Deaths, 2008–2010 (Age-adjusted Death Rate per 100,000 Population)	85	6.8	👍	9.2	--
Poisoning, 2006–2010 and U.S. 2006–2009 (Age-adjusted Death Rate per 100,000 Population)	87	17.4	↕	18.8	13.1
Suicide, 2006–2010 and U.S. 2006–2009 (Age-adjusted Death Rate per 100,000 Population)	89	15.1	↕	15.8	11.4
COMMUNICABLE DISEASE					
Adults Receiving Seasonal Influenza Vaccination in the Past 12 Months (Percentage of Adults Aged 65+)	92	60.6%	↕	56.9%	--
Adults Ever Receiving Pneumococcal Vaccination, 2011 (Percentage of Adults Aged 65+)	93	75.1%	↕	70.4%	70.0%
Pertussis Cases, 2005–2011 (Reported Cases per 100,000 Population)	96	9.6	--	18.0	--
Chlamydia, 2010 (Cases per 100,000 Population)	98	222.4	--	234.9	--
Gonorrhea, 2010 (Cases per 100,000 Population)	100	12.1	--	10.9	--

ACCESS TO CARE/UTILIZATION OF CARE	Page	Count/Rate	Compare	Utah	U.S.
Cost as a Barrier to Care in Past Year, 2011 (Age-adjusted Percentage of Adults)	104	12.0%		16.1%	--
No Health Insurance Coverage, 2011 (Age-adjusted Percentage of Persons)	105	6.8%		13.3%	--
Routine Medical Check-up in the Past 12 Months, 2011 (Age-adjusted Percentage of Adults)	110	59.6%		57.2%	--
Routine Dental Visit in the Past Year, 2010 (Age-adjusted Percentage of Adults)	111	73.7%		68.7%	67.9%
Asthma-related Emergency Department Visits, 2008–2010 (Age-adjusted Rate per 10,000 Population)	113	18.2		23.6	--
At Least Two Hemoglobin A1C Tests in the Past 12 Months, 2009–2011 (Age-adjusted Percentage of Adults with Diabetes)	114	69.1%		67.0%	66.0%


Key to Symbols:

For information on confidence intervals, see: <http://health.utah.gov/oph/IBIShelp/ConfInts.pdf>.

** The estimate has been suppressed because:

- (1) the relative standard error is greater than 50% or can't be determined or
- (2) the observed number of events is very small and not appropriate for publication

 Community value is not significantly different from the state value.

 Excellent: The community is performing BETTER than the state, and the difference IS statistically significant.

 Reason for Concern: The community is performing WORSE than the state, and the difference IS statistically significant.

-- Either the comparison value or confidence interval data are not available.

n/a Not Applicable: This indicator has no target direction.

The community value is considered statistically significantly different from the state value if the state value is outside the range of the community's 95% confidence interval. If the community's data or 95% confidence interval information is not available, "--" will be displayed.

NOTE: In this report, the assessment of whether a community is better or worse is based solely on the statistical difference between the community and state values. When selecting priority health issues to work on, a community should take into account additional factors such as how much improvement could be made, the U.S. value, the statistical stability of the community number, the severity of the health condition, and whether the difference is clinically significant.

4 Community Health Needs Assessment (CHNA) Report

CHNA.org is a free web-based platform designed to assist hospitals, non-profit organizations, state and local health departments, financial institutions, and other organizations seeking to better understand the needs and assets of their communities, and to collaborate to make measurable improvements in community health and well-being.

The “core outcome and action indicators framework” used is associated with the County Health Rankings/Roadmaps to Health, the Community Guide, Healthy People 2020, and other widely used sources of indicators and evidence-informed program activities. The framework is also derived from the shared national priorities identified in the National Prevention Strategy, the Community Transformation Grant Program, and the Leading Health Indicators for Healthy People 2020.

This appendix is a report that shows only the indicators where Davis County is not meeting benchmarks, either Healthy People 2020 targets or state averages.



beta 2.0

COMMUNITY HEALTH NEEDS ASSESSMENT

Advancing Community Health and Well Being

CHNA Data Report

Physical Environment

Report Area: Davis County, Utah

Physical Environment // Clinical Care // Health Behaviors // Health Outcomes

- Grocery Store Access
- Poor Air Quality (Particulate Matter 2.5)
- WIC-Authorized Food Store Access

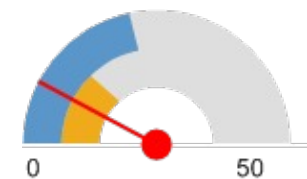
A community's health also is affected by the physical environment. A safe, clean environment that provides access to healthy food and recreational opportunities is important to maintaining and improving community health.

Grocery Store Access

This indicator reports the number of grocery stores per 100,000 population. Grocery stores are defined as supermarkets and smaller grocery stores primarily engaged in retailing a general line of food, such as canned and frozen foods; fresh fruits and vegetables; and fresh and prepared meats, fish, and poultry. Included are delicatessen-type establishments. Convenience stores and large general merchandise stores that also retail food, such as supercenters and warehouse club stores are excluded. This indicator is relevant because it provides a measure of healthy food access and environmental influences on dietary behaviors.

Report Area	Total Population, 2010 Census	Number of Establishments	Establishment Rate (Per 100,000 Pop.)
Davis County, Utah	306,479	24	7.83
Utah	2,763,885	362	13.10
United States	308,745,538	67,342	21.81

Establishment Rate (Per 100,000 Pop.)

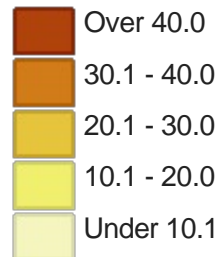


Note: This indicator is compared with the state average. No breakout data available.
 Data Source: [U.S. Census Bureau, County Business Patterns, 2010](#). Source geography: County.

■ Davis County, Utah
 ■ Utah
 ■ United States



Grocery Stores (Per 100,000 Pop.), By County, US Census County Business Patterns, 2010

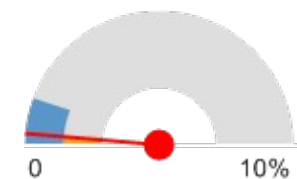


Poor Air Quality (Particulate Matter 2.5)

This indicator reports the percentage of days with particulate matter 2.5 levels above the National Ambient Air Quality Standard (35 micrograms per cubic meter) per year, calculated using data collected by monitoring stations and modeled to include counties where no monitoring stations occur. This indicator is relevant because poor air quality contributes to respiratory issues and overall poor health.

Report Area	Average Daily Ambient Particulate Matter 2.5	Number of Days Exceeding Emissions Standards	Percentage of Days Exceeding Emissions Standards
Davis County, Utah	9.32	1.05	0.29%
Utah	8.07	1.07	0.26%
United States	10.72	4.07	1.16%

Percentage of Days Exceeding Emissions Standards



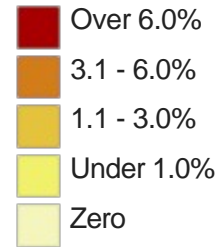
■ Davis County, Utah
 ■ Utah
 ■ United States

Note: This indicator is compared with the state average. No breakout data available.
 Data Source: [Centers for Disease Control and Prevention, National Environmental Public Health Tracking Network, 2008](#). Source geography: Tract.



Pct. of Days Above National Ambient Air Quality Standard (PM 2.5), By Tract, CDC

2008

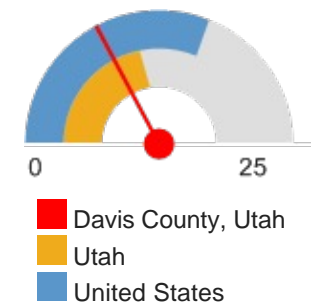


WIC-Authorized Food Store Access

This indicator reports the number of food stores and other retail establishments per 100,000 population that are authorized to accept WIC Program (Special Supplemental Nutrition Program for Women, Infants, and Children) benefits and that carry designated WIC foods and food categories. This indicator is relevant because it provides a measure of food security and healthy food access for women and children in poverty as well as environmental influences on dietary behaviors.

Report Area	Total Population (2011 Estimate)	Number WIC-Authorized Food Stores	WIC-Authorized Food Store Rate (Per 100,000 Pop.)
Davis County, Utah	311,814	27	8.60
Utah	2,823,740	312	11
United States	318,921,538	50,042	15.60

WIC-Authorized Food Store Rate (Per 100,000 Pop.)

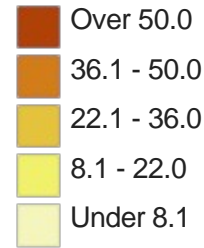


Note: This indicator is compared with the state average. No breakout data available.

Data Source: [U.S. Department of Agriculture, Food Environment Atlas, 2012](#). Source geography: County.



WIC-Authorized Stores (Per 100,000 Pop.), 2011



Clinical Care

A lack of access to care presents barriers to good health. The supply and accessibility of facilities and physicians, the rate of uninsurance, financial hardship, transportation barriers, cultural competency, and coverage limitations affect access.

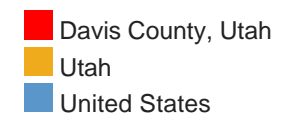
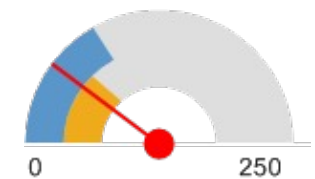
Rates of morbidity, mortality, and emergency hospitalizations can be reduced if community residents access services such as health screenings, routine tests, and vaccinations. Prevention indicators can call attention to a lack of access or knowledge regarding one or more health issues and can inform program interventions.

Access to Primary Care

This indicator reports the number of primary care physicians per 100,000 population. This indicator is relevant because a shortage of health professionals contributes to access and health status issues.

Report Area	Total Population	Total Primary Care Providers	Primary Care Provider Rate (Per 100,000 Pop.)
Davis County, Utah	306,479	156	50.90
Utah	2,763,885	1,791	64.80
United States	312,471,327	264,897	84.70

Primary Care Provider Rate (Per 100,000 Pop.)

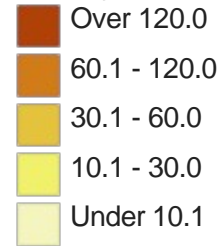


Note: This indicator is compared with the state average. No breakout data available.

Data Source: [U.S. Health Resources and Services Administration Area Resource File, 2011](#). Source geography: County.



Primary Care Physicians (Per 100,000 Pop.), By County, HRSA 2011



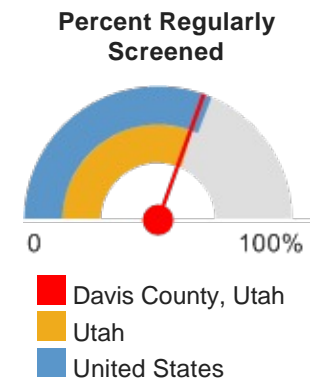
Breast Cancer Screening (Mammogram)

This indicator reports the percentage of female Medicare enrollees, age 55 or older, who have received one or more mammograms in the past two years. This indicator is relevant because engaging in preventive behaviors allows for early detection and treatment of health problems. This indicator can also highlight a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services.

Report Area	Total Female Medicare Enrollees	Number Regularly Screened	Percent Regularly Screened
Davis County, Utah	1,427	872	61.11%
Utah	12,082	7,512	62.18%
United States	4,203,461	2,660,626	63.30%

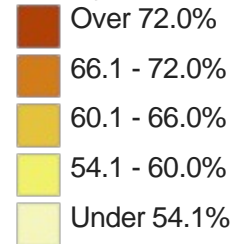
Note: This indicator is compared with the state average. No breakout data available.

Data Source: [Dartmouth Atlas of Healthcare, Selected Measures of Primary Care Access and Quality, 2003-2007](#). Source geography: County.





Percentage of Medicare Patients (Female) with Mammogram, Past 2 Years, By County, Dartmouth Atlas 2003-2007



High Blood Pressure Management

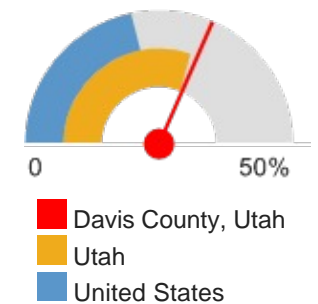
This indicator reports the percentage of adults aged 18 and older who self-report that they are not taking medication for their high blood pressure. This indicator is relevant because engaging in preventive behaviors decreases the likelihood of developing future health problems. When considered with other indicators of poor health, this indicator can also highlight a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services.

Report Area	Total Population (Age 18)	Number Adults Not Taking Blood Pressure Medication (When Needed)	Percent Adults Not Taking Medication
Davis County, Utah	193,680	61,241	31.62%
Utah	1,823,488	558,170	30.61%
United States	232,747,222	50,606,335.52	21.74%

Note: This indicator is compared with the state average. No breakout data available.

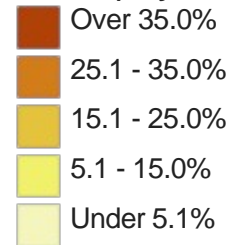
Data Source: [Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2006-2010](#). Source geography: County.

Percent Adults Not Taking Medication





Pct. of Adults (Age 18) Not Taking Medicine for High Blood Pressure (When Present), by County, CDC BRFSS 2006-2010



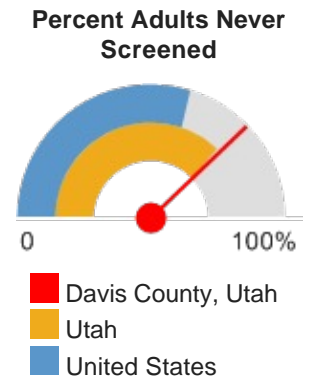
HIV Screenings

This indicator reports the percentage of teens and adults age 12-70 who self-report that they have never been screened for HIV. This indicator is relevant because engaging in preventive behaviors allows for early detection and treatment of health problems. This indicator can also highlight a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services.

Report Area	Total Population (Age 18)	Number Adults Never Screened	Percent Adults Never Screened
Davis County, Utah	193,680	146,499	75.64%
Utah	1,823,488	1,361,963	74.69%
United States	232,747,222	139,253,113.51	59.83%

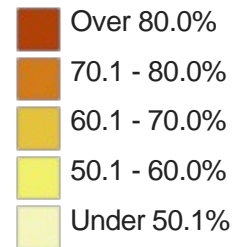
Note: This indicator is compared with the state average. No breakout data available.

Data Source: [Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2006-2010](#). Source geography: County.





Pct. of Population (Age 18) Never Screened for HIV/AIDS, By County, CDC BRFSS 2006-2010



Population Living in a Health Professional Shortage Area

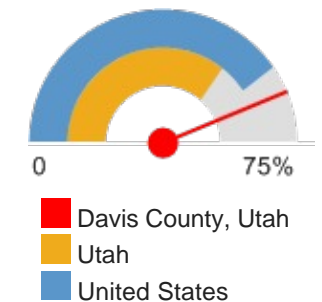
This indicator reports the percentage of the population that is living in a geographic area designated as a "Health Professional Shortage Area" (HPSA), defined as having a shortage of primary medical care, dental or mental health professionals. This indicator is relevant because a shortage of health professionals contributes to access and health status issues.

Report Area	Total Population, 2010 Census	HPSA Designation Population	Underserved Population	Percent of Designated Population Underserved
Davis County, Utah	306,479	11,037.96	7,237.98	65.57%
Utah	2,769,922	404,768.71	218,173.82	53.90%
United States	312,676,557	52,826,822.65	32,117,352.05	60.80%

Note: This indicator is compared with the state average. No breakout data available.

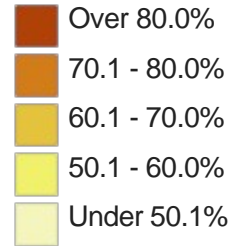
Data Source: U.S. Health Resources and Services Administration, Health Professional Shortage Area File, 2012. Source geography: HPSA.

Percent of Designated Population Underserved





Underserved Population in HPSA for Primary Care Providers, 2011



Health Behaviors

Health behaviors such as poor diet, a lack of exercise, and substance abuse contribute to poor health status.

Inadequate Fruit/Vegetable Consumption (Adult)

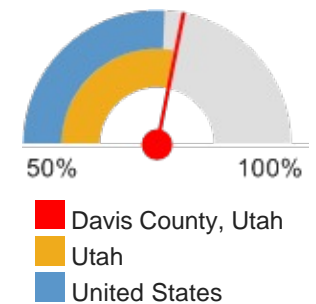
This indicator reports the percentage of adults aged 18 and older who self-report consuming less than 5 servings of fruits and vegetables each day. This indicator is relevant because current behaviors are determinants of future health, and because unhealthy eating habits may illustrate a cause of significant health issues, such as obesity and diabetes.

Report Area	Total Population (Age 18)	Population Consuming Few Fruits or Vegetables	Percent Consuming Few Fruits or Vegetables
Davis County, Utah	190,202	148,928.17	78.30%
Utah	94,533	73,736	78.00%
United States	111,821,887	84,891,309	75.92%

Note: This indicator is compared with the state average. No breakout data available.

Data Source: [Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2003-2009](#). Source geography: County.

Percent Consuming Few Fruits or Vegetables





Health Outcomes

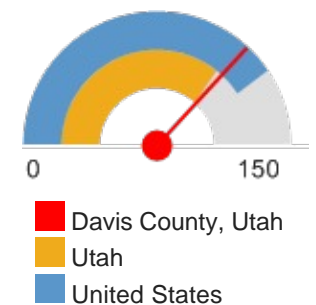
Measuring morbidity and mortality rates allows assessing linkages between social determinants of health and outcomes. By comparing, for example, the prevalence of certain chronic diseases to indicators in other categories (e.g., poor diet and exercise) with outcomes (e.g., high rates of obesity and diabetes), various causal relationship may emerge, allowing a better understanding of how certain community health needs may be addressed.

Breast Cancer Incidence

This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of females with breast cancer adjusted to 2000 U.S. standard population age groups (Under Age 1, 1-4, 5-9, ..., 80-84, 85 and older). This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

Report Area	Total Population, ACS 2005-2009	Annual Incidence, 2005-2009 Average	Annual Incidence Rate (Per 100,000 Pop.)
Davis County, Utah	286,502	317	110.60
Utah	2,651,816	2,864	108
United States	301,461,536	367,783	122

Annual Incidence Rate (Per 100,000 Pop.)

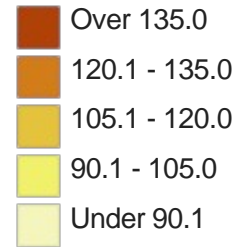


Note: This indicator is compared with the state average.

Data Source: [The Centers for Disease Control and Prevention](#), and [the National Cancer Institute: State Cancer Profiles, 2005-2009](#). Source geography: County.



Breast Cancer Age Adjusted Incidence Rate (Per 100,000 Pop.), By County, NCI 2005-2009

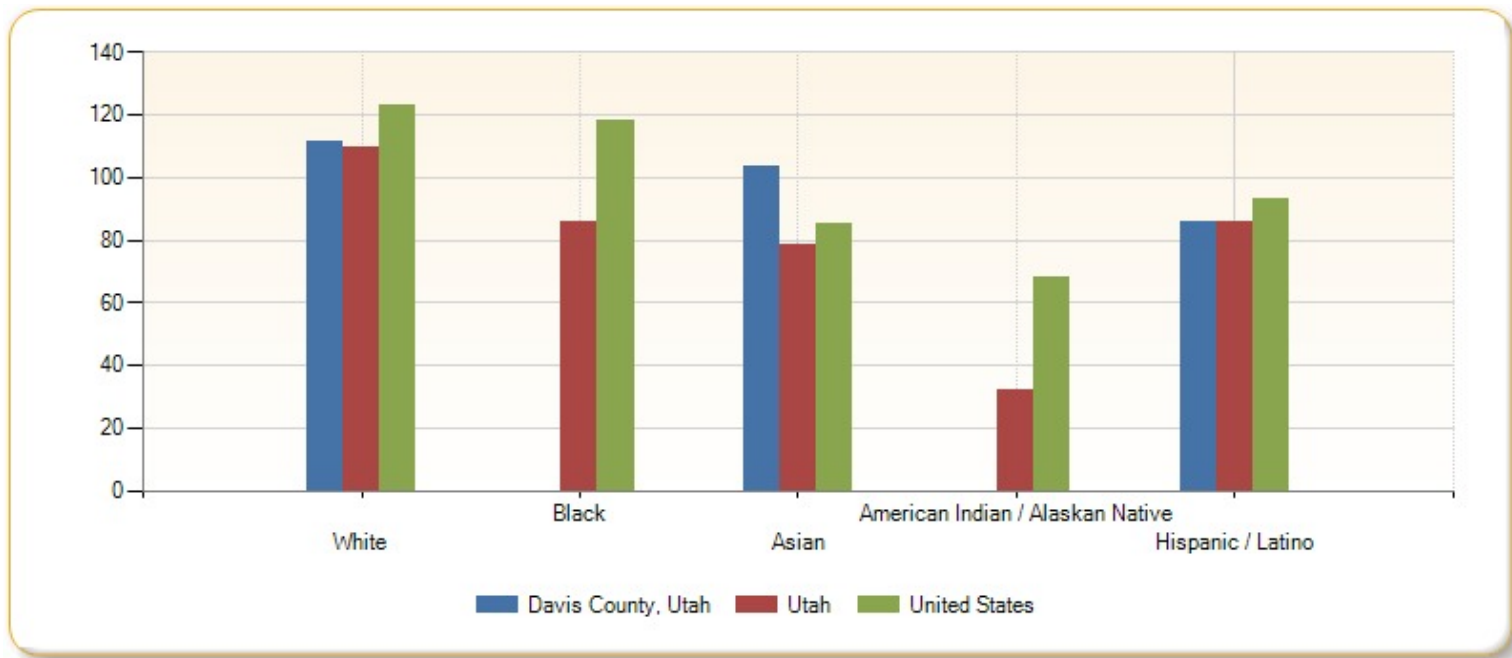


Population by Race / Ethnicity, New Breast Cancer Incidence (Count)

Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
Davis County, Utah	293	no data	5	no data	18
Utah	2,607	23	41	10	263
United States	276,098	43,972	11,261	1,655	280,661

Population by Race / Ethnicity, Breast Cancer Incidence Rate (Per 100,000)

Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
Davis County, Utah	111.22	no data	103.41	no data	85.64
Utah	109.70	86	78.30	32.30	85.80
United States	123	118	85.30	68.30	93.10



Chlamydia Incidence

This indicator reports incidence rate of chlamydia cases per 100,000 population. This indicator is relevant because it is a measure of poor health status and indicates the prevalence of unsafe sex practices.

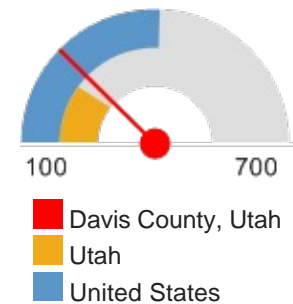
Report Area	Total Population, 2010 Census	Reported Cases of Chlamydia	Chlamydia Rate (Per 100,000 Pop.)
Davis County, Utah	306,479	755	246.35
Utah	2,763,885	6,145	224.65
United States	308,730,677	1,236,680	406.89

Note: This indicator is compared with the state average. No breakout data available.

Data Source: [Centers for Disease Control and Prevention and the National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, 2009.](#)

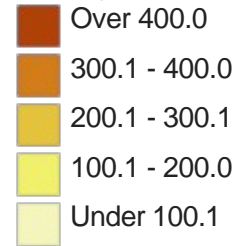
Source geography: County.

Chlamydia Rate (Per 100,000 Pop.)





Chlamydia Incidence (Per 100,000 Pop.), By County, CDC 2009



Low Birth Weight

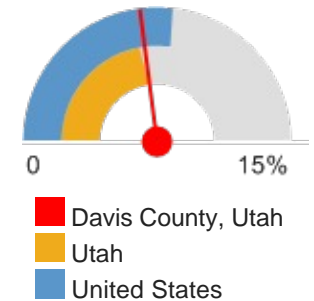
This indicator reports the percentage of total births that were low birth weight (Under 2500g). This indicator is relevant because low birth weight infants are at high risk for health problems. This indicator can also highlight the existence of health disparities.

Report Area	Total Births	Number Low Birth Weight (< 2500g)	Percent Low Birth Weight
Davis County, Utah	40,194	2,764	6.88%
Utah	365,195	24,458	6.70%
United States	29,126,451	2,359,843	8.10%

Note: This indicator is compared with the state average. No breakout data available.

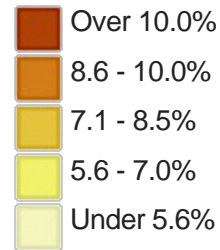
Data Source: [Centers for Disease Control and Prevention, National Vital Statistics Systems, 2003-2009](#). Accessed through the [Health Indicators Warehouse](#). Source geography: County.

Percent Low Birth Weight





Pct. of Total Live Births, By County, NCHS 2002-2008



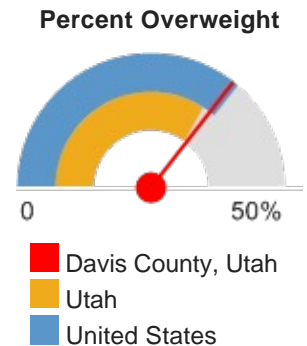
Overweight (Adult)

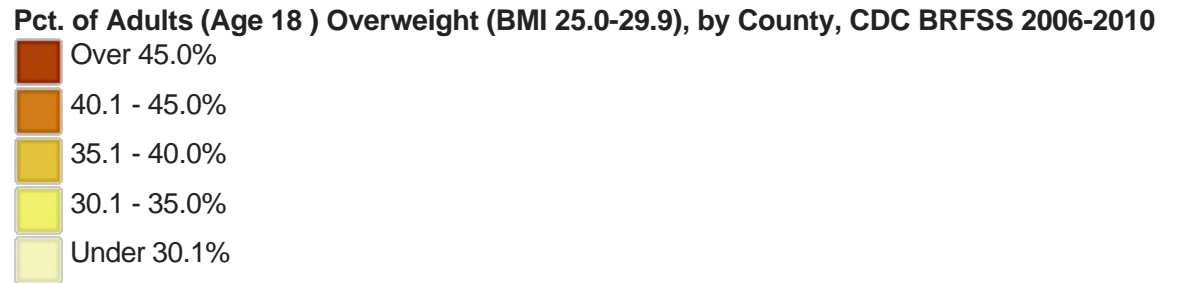
This indicator reports the percentage of adults aged 18 and older who self-report that they have a Body Mass Index (BMI) between 25.0 and 30.0 (overweight). This indicator is relevant because excess weight is a prevalent problem in the U.S.; it indicates an unhealthy lifestyle and puts individuals at risk for further health issues.

Report Area	Total Population (Age 18)	Number Overweight	Percent Overweight
Davis County, Utah	193,680	69,008	35.63%
Utah	1,823,488	628,556	34.47%
United States	232,747,222	84,521,271.09	36.31%

Note: This indicator is compared with the state average. No breakout data available.

Data Source: [Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2006-2010](#). Source geography: County.



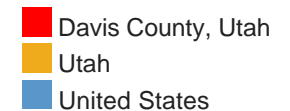
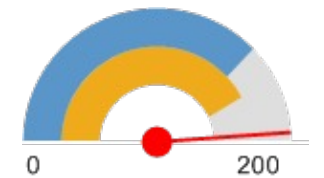


Prostate Cancer Incidence

This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of males with prostate cancer adjusted to 2000 U.S. standard population age groups (Under age 1, 1-4, 5-9, ..., 80-84, 85 and older). This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

Report Area	Total Population, ACS 2005-2009	Annual Incidence, 2005-2009 Average	Annual Incidence Rate (Per 100,000 Pop.)
Davis County, Utah	286,502	560	195.40
Utah	2,651,816	4,502	169.80
United States	301,461,536	456,412	151.40

Annual Incidence Rate (Per 100,000 Pop.)

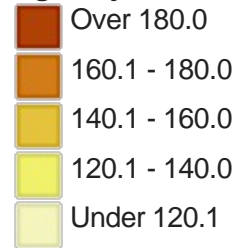


Note: This indicator is compared with the state average.

Data Source: [The Centers for Disease Control and Prevention, and the National Cancer Institute: State Cancer Profiles, 2005-2009](#). Source geography: County.



Age Adjusted Rate (Per 100,000 Pop.), By County, NCI 2004-2008

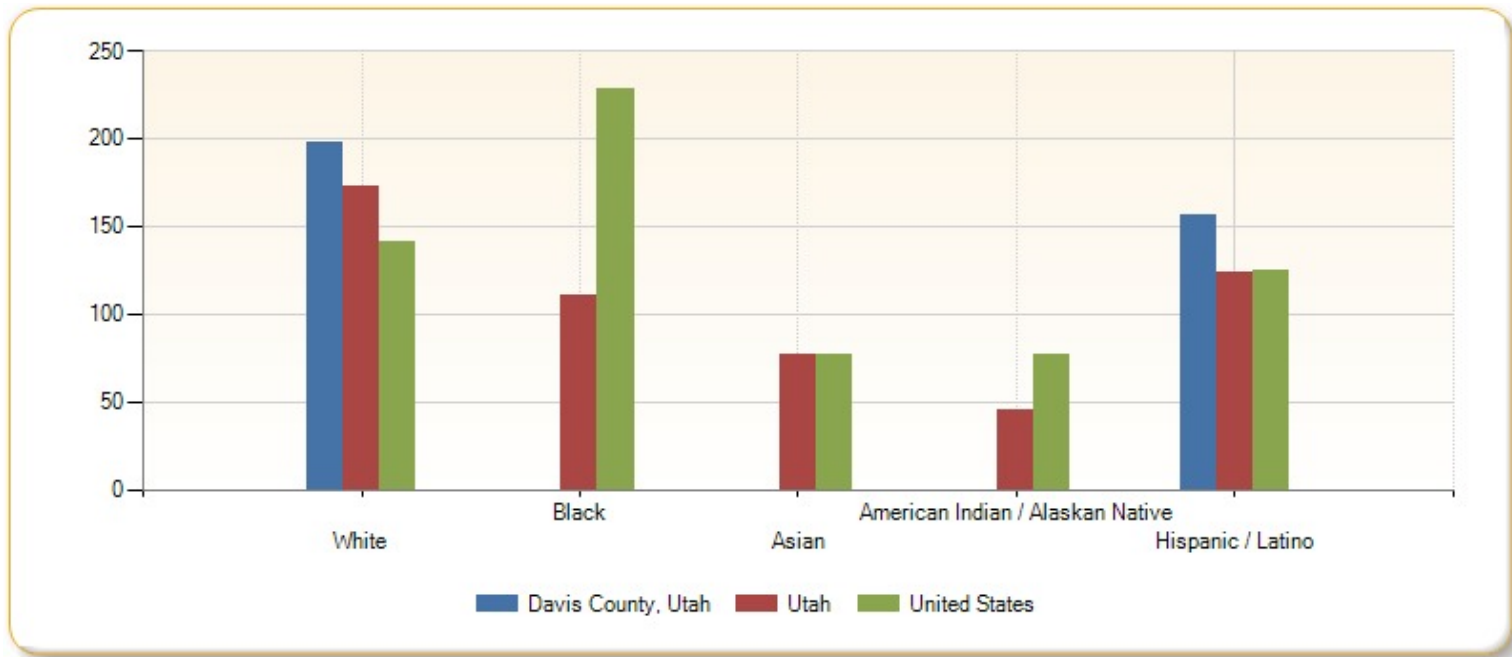


Population by Race / Ethnicity, New Prostate Cancer Incidence (Count)

Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
Davis County, Utah	521	no data	no data	no data	33
Utah	4,114	30	40	14	380
United States	316,053	85,187	10,151	1,861	375,018

Population by Race / Ethnicity, Prostate Cancer Incidence Rate (Per 100,000)

Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
Davis County, Utah	197.77	no data	no data	no data	157.01
Utah	173.10	110.30	76.70	45.50	124.20
United States	140.80	228.60	76.90	76.80	124.40

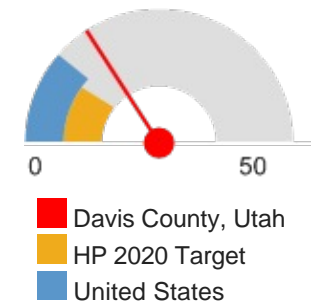


Suicide

This indicator reports the rate of death due to intentional self-harm (suicide) per 100,000 population. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because suicide is an indicator of poor mental health.

Report Area	Total Population, 2006-2010 Average	Annual Deaths, 2006-2010 Average	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate (Per 100,000 Pop.)
Davis County, Utah	294,256	43	14.68	15.95
Utah	2,654,718	410	15.46	16.81
United States	303,844,430	35,841	11.80	11.57
HP 2020 Target				<= 10.2

Age-Adjusted Death Rate (Per 100,000 Pop.)



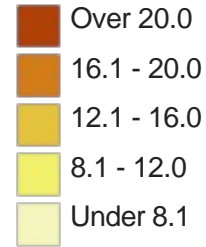
Note: This indicator is compared with the Healthy People 2020 Target.

Data Source: [Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death, 2006-2010...](#)

Accessed through [CDC WONDER](#). Source geography: County.

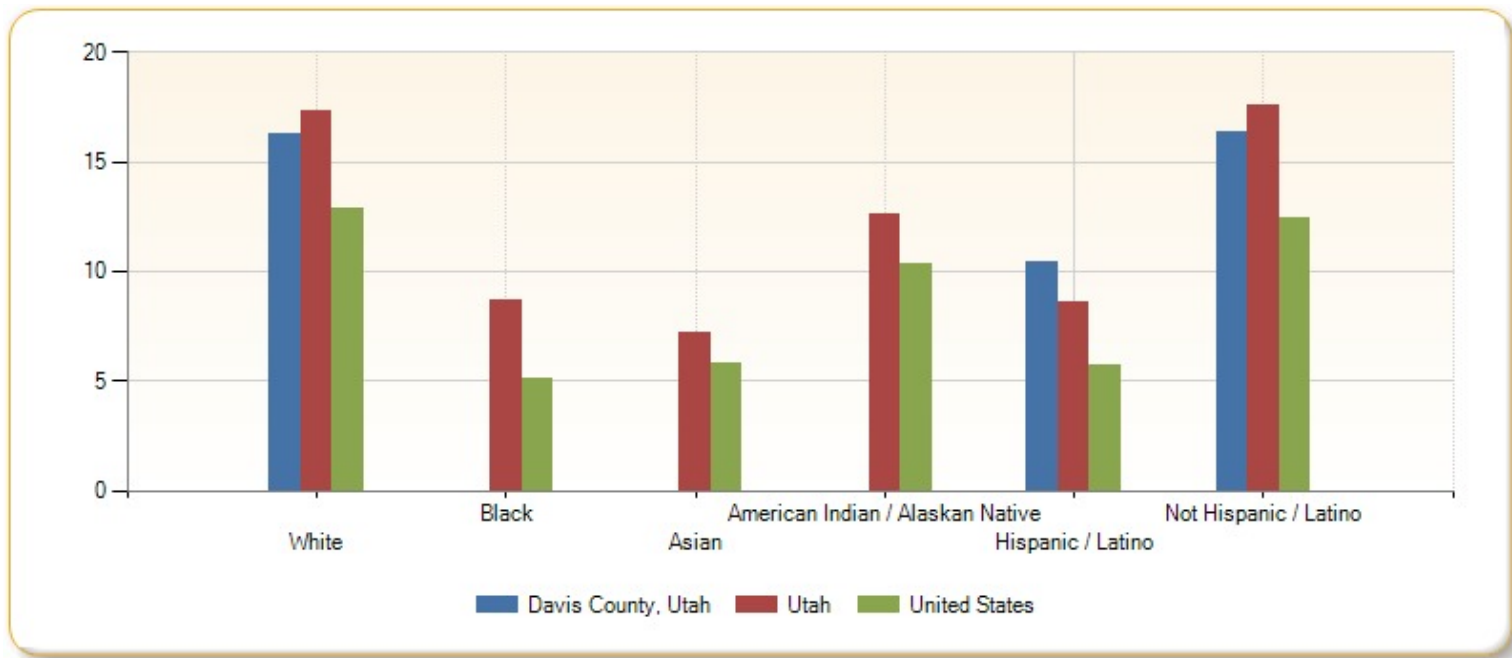


Death Rate (Per 100,000 Pop.), By County, CDC NVSS 2006-2010



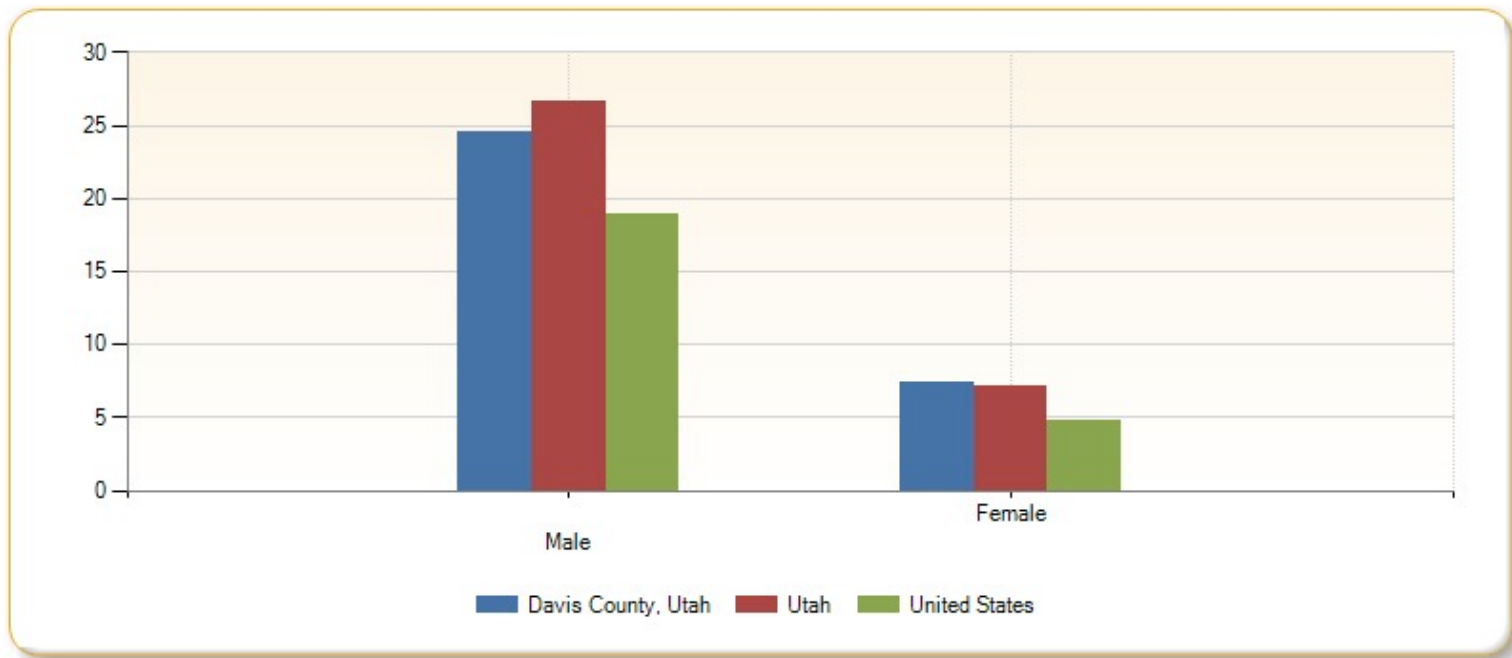
Population by Race / Ethnicity, Suicide, Age-Adjusted Rate (Per 100,000 Pop.)

Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino	Not Hispanic / Latino
Davis County, Utah	16.25	no data	no data	no data	10.47	16.39
Utah	17.28	8.70	7.20	12.60	8.60	17.61
United States	12.89	5.11	5.80	10.30	5.71	12.44



Population by Gender, Suicide Mortality, Age-Adjusted Rate (Per 100,000 Pop.)

Report Area	Male	Female
Davis County, Utah	24.58	7.41
Utah	26.68	7.16
United States	18.96	4.77



Report prepared by CHNA.org (<http://www.chna.org>) on March 27, 2013.

5 Healthy People 2020—Leading Health Indicators

Healthy People provides science-based, 10-year national objectives for improving the health of all Americans. For 3 decades, Healthy People has established benchmarks and monitored progress over time in order to encourage collaborations across communities and sectors, empower individuals toward making informed health decisions, and measure the impact of prevention activities.

Healthy People 2020 includes a small set of high-priority health issues that represent significant threats to the public's health. Selected from the Healthy People 2020 objectives, the 26 Leading Health Indicators (LHIs), organized under 12 topic areas, address determinants of health that promote quality of life, healthy behaviors, and healthy development across all life stages. The LHIs provide a way to assess the health of the nation for key areas, facilitate collaboration across diverse sectors, and motivate action at the national, state, and local levels.

5 Healthy People 2020—Leading Health Indicators

Health People 2020 Leading Health Indicators			
Leading Health Indicators	U.S. Baseline %	Year Collected	HP2020 Target
Access to Health Services			
Increase the proportion of persons with medical insurance	83.2	2008	100
Increase the proportion of persons with a usual primary care provider	76.3	2007	83.9
Adolescent Health			
Increase the proportion of students who graduate with a regular diploma 4 years after starting 9th grade	74.9	2007-08	82.4
Cancer			
Increase the proportion of adults who receive a colorectal cancer screening based on the most recent guidelines	52.1	2008	70.5
Diabetes			
Reduce the proportion of persons with diabetes with an A1c value greater than 9%	17.9	2005-08	16.1
Environmental Health			
Reduce the number of days the Air Quality Index exceeds 100, weighted by population and AQI	2.2 billion	2008	1.98 billion
Family Planning			
Increase the proportion of sexually experienced females aged 15–44 years who received reproductive health services in the past 12 months	78.6	2006-10	86.5
Heart Disease and Stroke			
Increase the proportion of adults with hypertension whose blood pressure is under control	43.7	2005-08	61.2
HIV			
Increase the proportion of persons living with HIV who know their serostatus	80.6	2006	90
Immunization and Infectious Disease			
Increase the percentage of children aged 10–35 months who receive the recommended doses of DTaP, polio, MMR, Hib, hepatitis B, varicella and pneumococcal conjugate vaccine (PCV)	44.3	2009	80
Injury and Violence Prevention			
Reduce fatal injuries	59.2	2007	53.3 (per 100,000 pop.)
Reduce homicides	6.1	2007	5.5 (per 100,000 pop.)

5 Healthy People 2020—Leading Health Indicators

Health People 2020 Leading Health Indicators			
Leading Health Indicators	U.S. Baseline %	Year Collected	HP2020 Target
Mental Health and Mental Disorders			
Reduce the suicide rate	11.3	2007	10.2 (per 100,000 pop.)
Reduce the proportion of adolescents aged 12–17 years who experience major depressive episodes (MDEs)	8.3	2008	7.4
Nutrition and Weight Status			
Reduce the proportion of adults who are obese	33.9	2005–08	30.5
Reduce the proportion of children and adolescents aged 2–19 years who are considered obese	16.1	2005–08	14.5
Increase the contribution of total vegetables to the diets of the population aged 2 years and older	.8 cup	2001–04	1.1 (per 1,100 calories)
Oral Health			
Increase the proportion of children, adolescents, and adults who used the oral health care system in the past year	44.5	2007	49
Physical Activity			
Increase the proportion of adults who meet the objectives for aerobic physical activity and for muscle-strengthening activity	18.2	2008	20.1
Substance Abuse			
Reduce the proportion of adolescents reporting use of alcohol or any illicit drugs during the past 30 days	18.4	2008	16.6
Reduce the proportion of persons engaging in binge drinking during the past 30 days, adults aged 18 years and older	27.1	2008	24.4
Tobacco Use			
Reduce cigarette smoking by adults	20.6	2008	12
Reduce use of cigarettes by adolescents (past month)	19.5	2009	16
Reduce the proportion of children aged 3–11 years exposed to secondhand smoke	52.2	2005–08	47

6 Division of Substance Abuse & Mental Health Annual Report, 2012

In the Substance Abuse and Mental Health Annual Report each local substance abuse and mental health provider agency has a 4 page snapshot with statistics for its area. Davis Behavioral Health is the agency serving Davis County. This appendix contains information about their prevention, substance abuse, and mental health efforts during 2012.

Davis Behavioral Health

Davis County



DAVIS BEHAVIORAL HEALTH INC

Population: 311,811

Substance Abuse and Mental Health Provider Agency:

Brandon Hatch, CEO/Director
 Davis Behavioral Health
 934 S. Main
 Layton, UT 84041
 Office: (801) 544-0585
 www.dbh.utah.gov

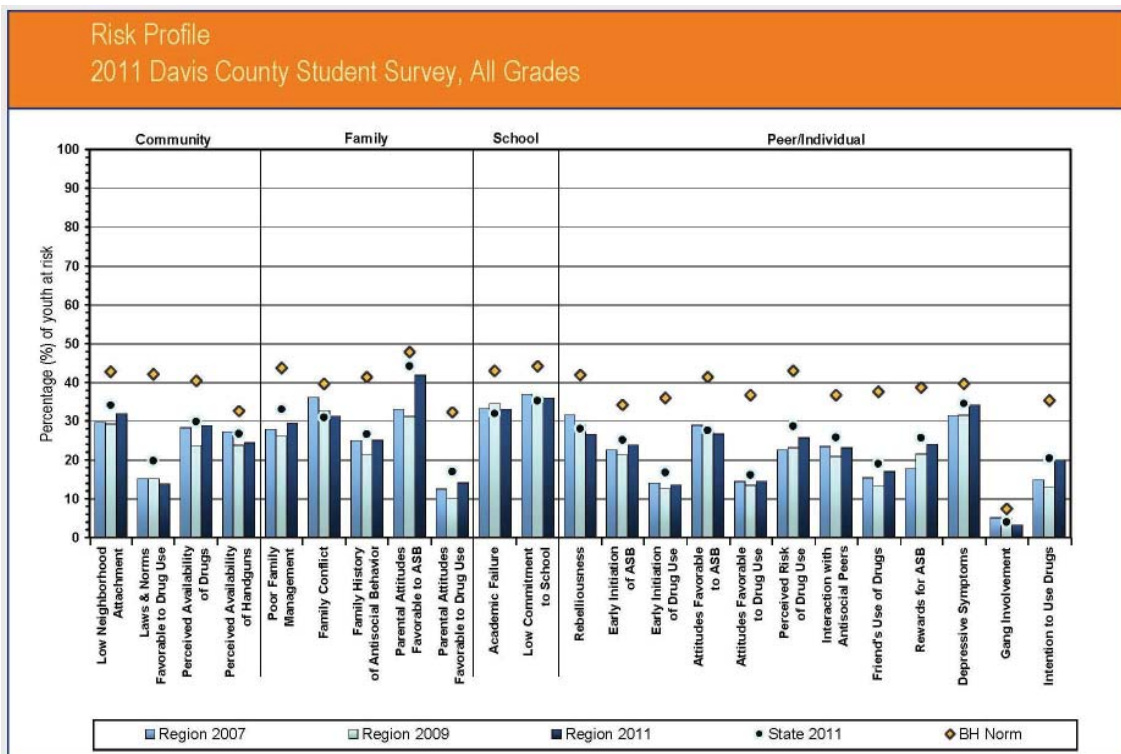
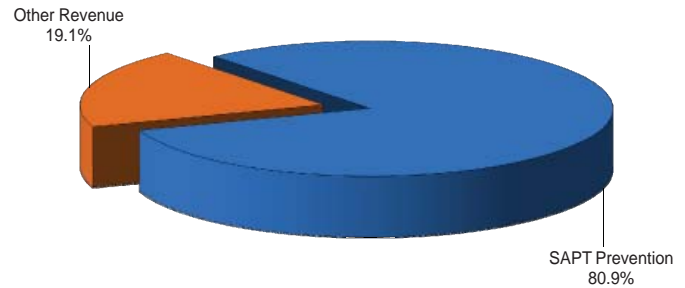
Davis Substance Abuse—Prevention

Prioritized Risk Factors: perceived risk of drug use, attitudes favorable to drug use, family conflict

Coalitions:

- Layton Communities that Care
- Bountiful Communities that Care

Source of Revenues
Fiscal Year 2012

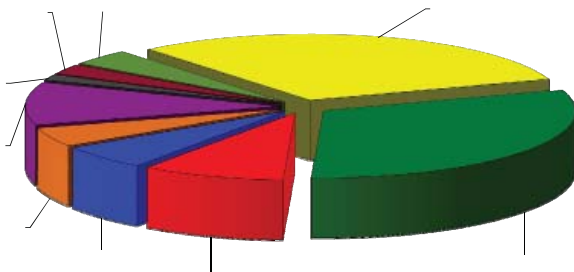
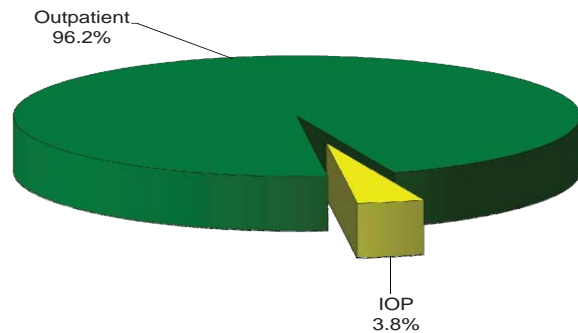


Davis Behavioral Health—Substance Abuse

Total Clients Served.....931
 Adult842
 Youth.....89
 Penetration Rate (Total population of area)..0.3%

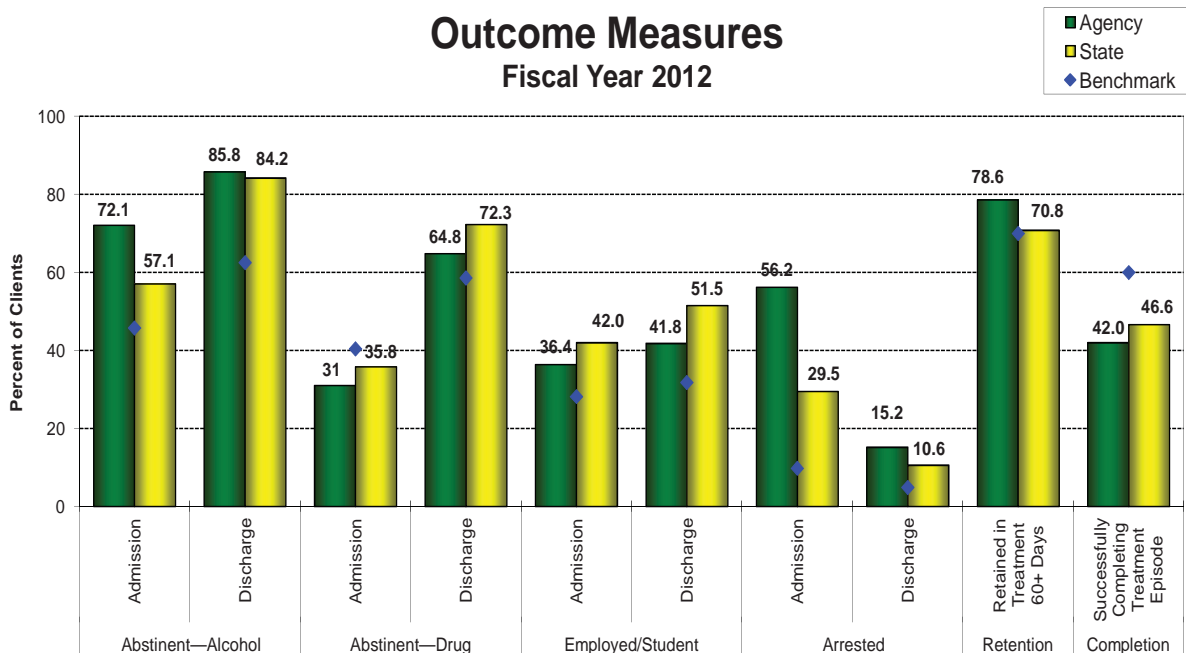
Total Admissions.....847
 Initial Admissions729
 Transfers.....118

**Admissions into Modalities
Fiscal Year 2012**



Primary Substance of Abuse at Admission			
	Male	Female	Total
Alcohol	106	76	182
Cocaine/Crack	11	8	19
Marijuana/Hashish	151	41	192
Heroin	59	47	106
Other Opiates/Synthetics	9	12	21
Hallucinogens	1	1	2
Methamphetamine	120	127	247
Other Stimulants	3	1	4
Benzodiazepines	2	3	5
Tranquilizers/Sedatives	0	1	1
Inhalants	0	0	0
Oxycodone	28	36	64
Club Drugs	0	0	0
Over-the-Counter	2	0	2
Other	1	1	2
Total	493	354	847

**Outcome Measures
Fiscal Year 2012**



Benchmark is 75% of the National Average.

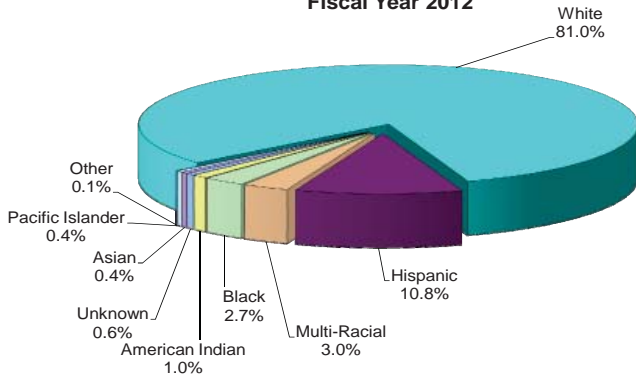
Davis Behavioral Health—Mental Health

Total Clients Served.....4,144
 Adult2,698
 Youth.....1,446
 Penetration Rate (Total population of area)..... 1.3%
 Civil Commitment 118
 Unfunded Clients Served345

Diagnosis

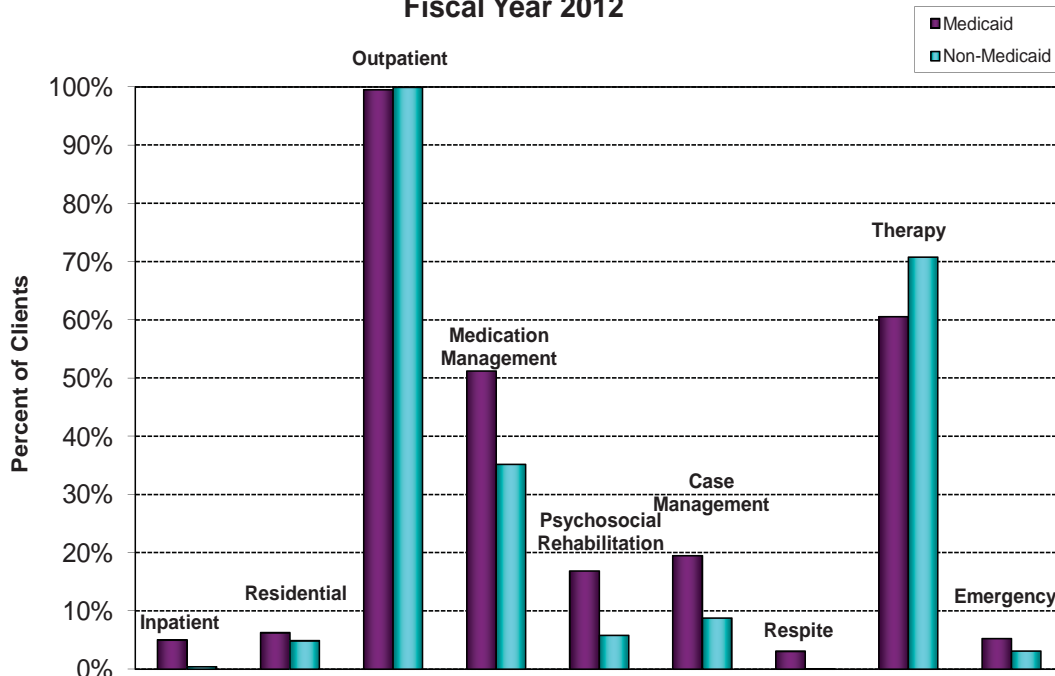
	Youth	Adult
Adjustment Disorder	215	184
Anxiety	606	1,332
Attention Deficit	647	241
Cognitive Disorder	17	67
Conduct Disorder	18	1
Depression	88	580
Impulse Control Disorders	229	41
Mood Disorder	462	1,288
Neglect or Abuse	374	33
Oppositional Defiant Disorder	261	10
Other	195	91
Personality Disorder	2	162
Pervasive Developmental Disorders	126	48
Schizophrenia and Other Psychotic	1	387
Substance Abuse	48	441
V Codes	162	57
Total	3,451	4,963

Race/Ethnicity Fiscal Year 2012

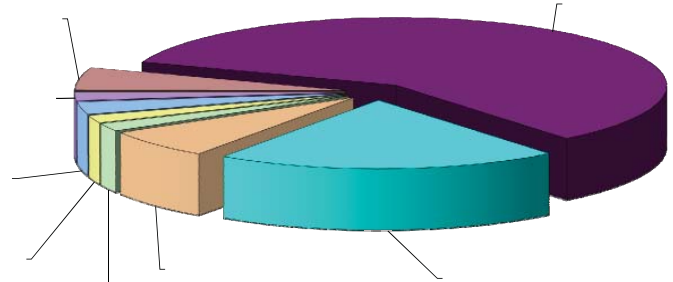


More than one race/ethnicity may have been selected.

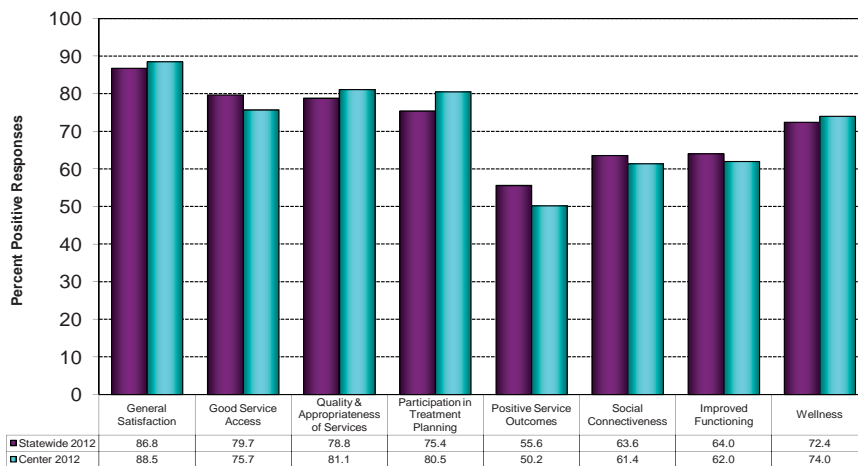
Utilization of Mandated Services Fiscal Year 2012



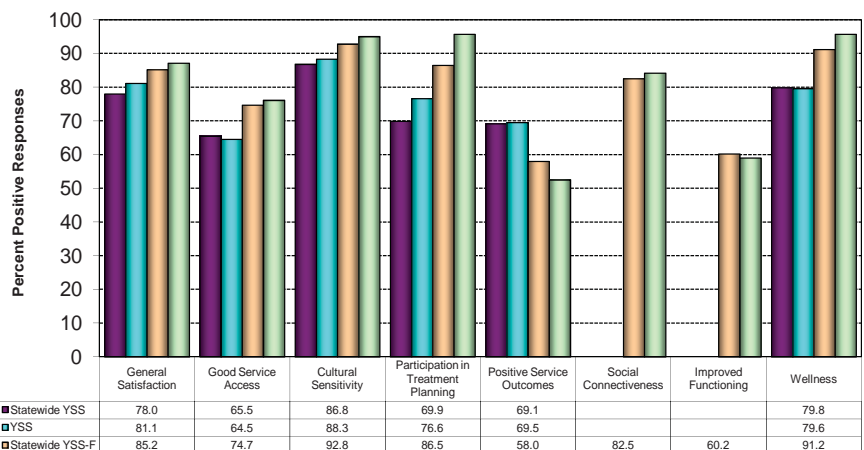
Davis Behavioral Health—Mental Health (Continued)



Adult Consumer Satisfaction Survey Mental Health
Statistics Improvement Program (MHSIP)
2012

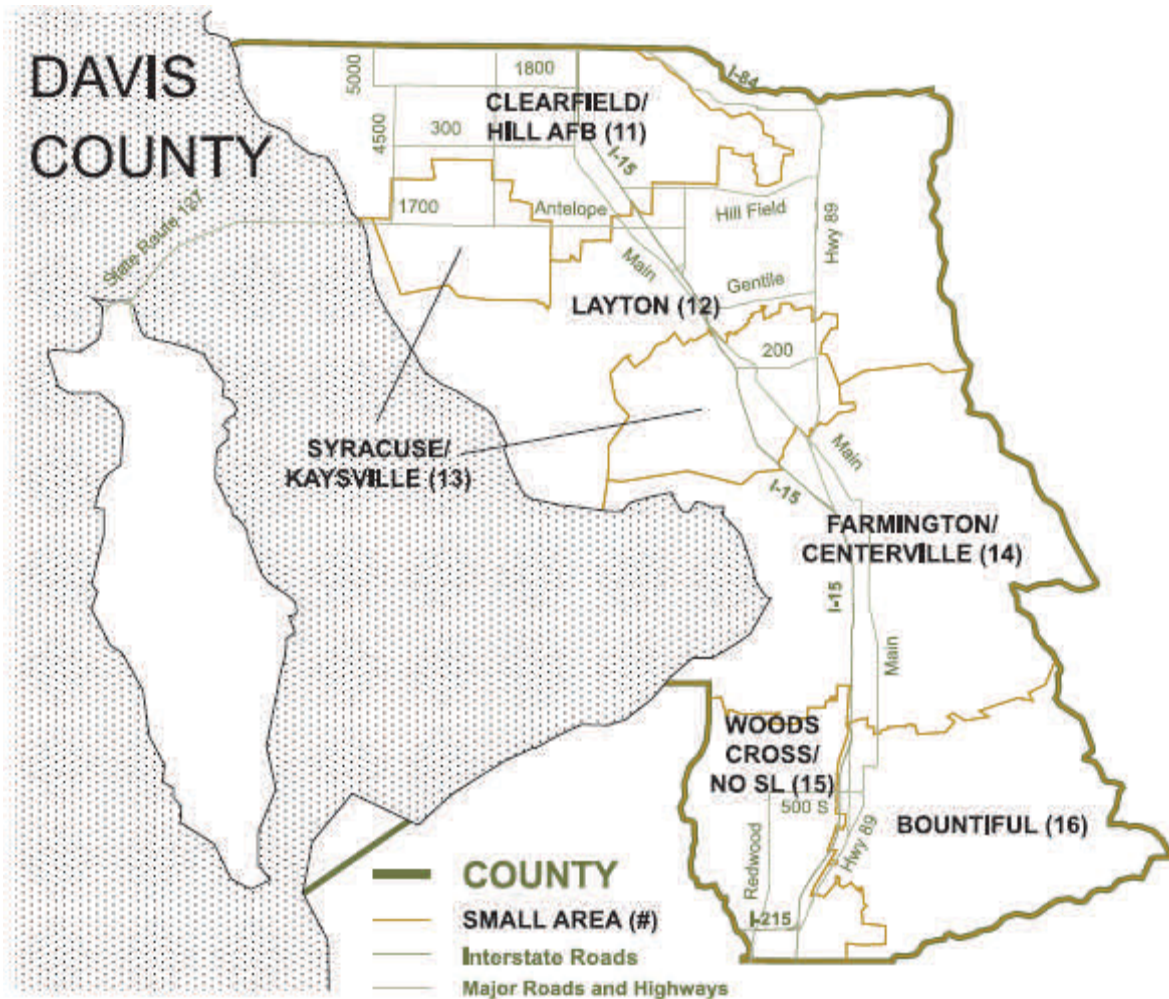


Youth Consumer Satisfaction Surveys
(YSS and YSS-F)
2012



7 Small Area Data Map

In order to facilitate reporting data at the community level, Utah has been divided into small areas. Areas are determined based on specific criteria, including population size, political boundaries of cities and towns, and economic similarity. The health measures reported by small area are those with events occurring with sufficient frequency to be meaningful. Some indicators in IBIS can be queried for 61 small areas in Utah. Davis County is divided into 6 small areas: Clearfield/Hill AFB, Layton, Syracuse/Kaysville, Farmington/Centerville, Woods Cross/North Salt Lake, and Bountiful. The map and table below show small area boundaries and definitions as they apply to Davis County.



#	Small Area	Zip Codes
11	Clearfield/Hill AFB	84015, 84016, 84056
12	Layton	84040, 84041, 84405*
13	Syracuse/Kaysville	84037, 84075
14	Farmington/Centerville	84025, 84014
15	Woods Cross/ No SL	84087, 84054
16	Bountiful	84010, 84011

* South Weber Only

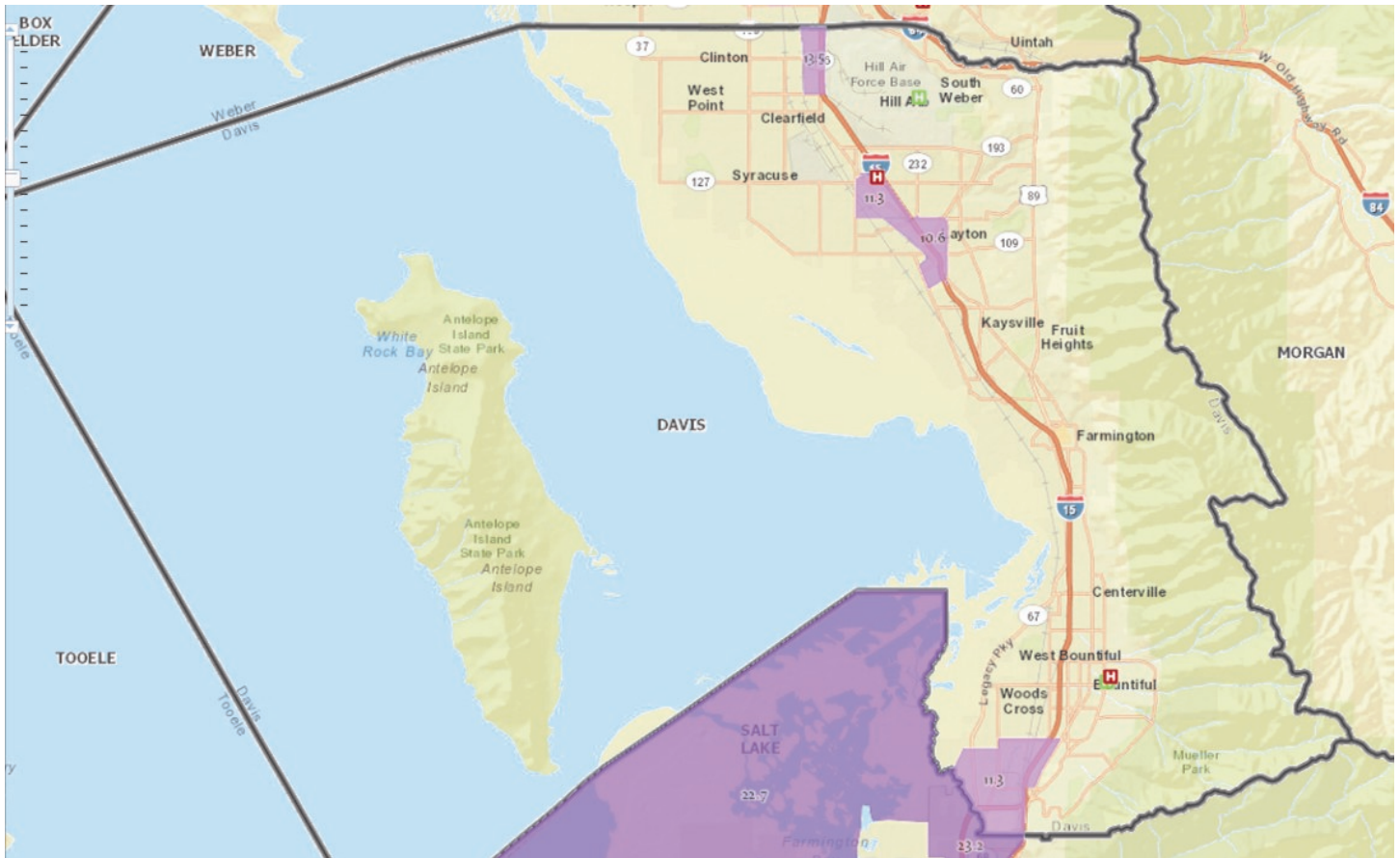
8 Top 20 Infectious Diseases, Davis County, 2012

Top 20 Diseases		
Disease	Rank	Number of Cases
Chlamydia	1	862
Hepatitis C, Acute & Chronic	2	196
Pertussis	3	139
Tuberculosis, Latent	4	81
Streptococcal Disease, Invasive	5	78
Cryptosporidiosis	6	46
Influenza, Hospitalized	7	43
Gonorrhea	8	40
Chickenpox	9	37
Giardia	9	37
Campylobacter	11	36
Hepatitis B, Acute & Chronic	12	21
Syphilis - All Stages	12	21
Salmonella	14	19
Meningitis, Aseptic/Viral	15	16
Shiga toxin-producing <i>E. coli</i>	16	12
HIV/AIDS	17	11
Coccidioidomycosis	18	9
Norovirus	19	6
Lyme Disease	20	4

Source: Davis County Health Department, http://www.co.davis.ut.us/health/featured_items/2012_communicable_disease.pdf

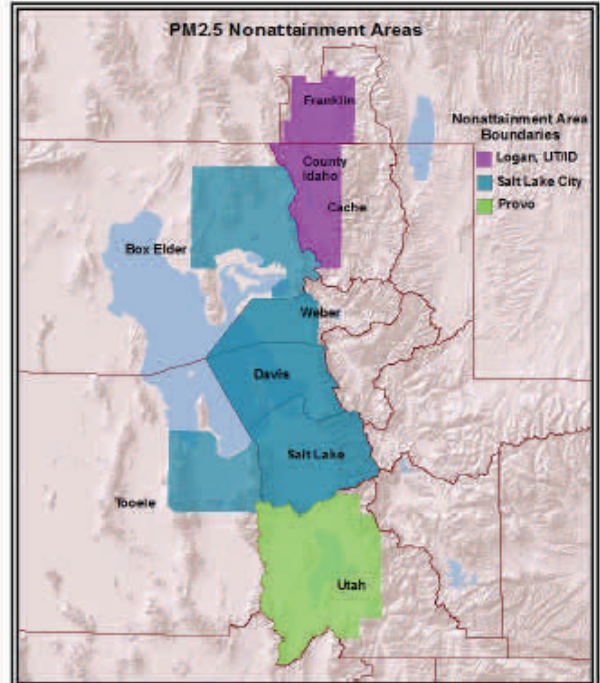
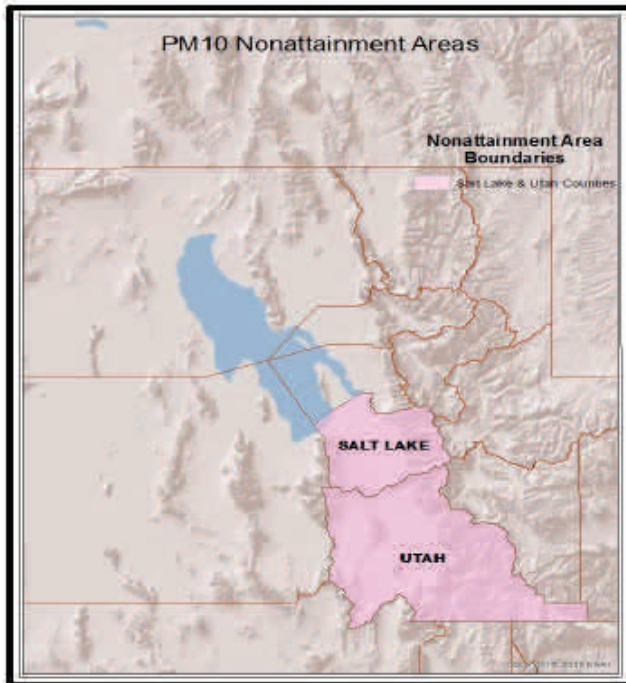
9 Population with Less Than High School Education by Census Tract

This is the map referenced within the social and economic factors section, education page 63. Purple highlights represent census tracts with populations where more than 10% have less than a high school education.

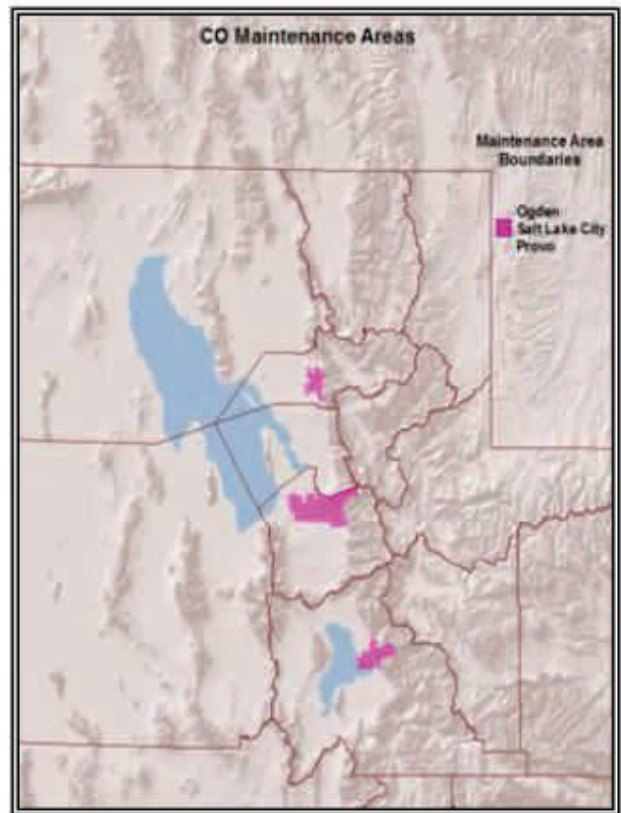


(Updated January 2013)

Utah Nonattainment Areas



Utah Maintenance Areas



11 Index: Graphs, Tables, Pictures & Maps

Graph Number	Title	Page
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2	Population Density by City	12
3	Age Distribution	13
4	Age Demographics by City 18 & Under, 65+	13
5	Age Projections	14
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12 Acronym List

A1C	Glycated Hemoglobin
ACS	American Community Survey
AMC	Air Monitoring Center
ASD	Autism Spectrum Disorder
AQI	Air Quality Index
BMI	Body Mass Index
BRCA1	Breast Cancer Susceptibility Gene 1
BRCA2	Breast Cancer Susceptibility Gene 2
BRFSS	Behavioral Risk Factor Surveillance System
CDC	Centers for Disease Control and Prevention
CHNA	Community Health Needs Assessment
CHR	County Health Rankings
CO	Carbon Monoxide
DATC	Davis Applied Technology College
DBH	Davis Behavioral Health
DCCS	Davis County Community Snapshot
DCHD	Davis County Health Department
DEQ	Department of Environmental Quality
D.O.	Doctor of Osteopathic Medicine
DSD	Davis School District
DTaP	Diphtheria, Tetanus, and Pertussis
D&RGW	Denver & Rio Grande Western
DUI	Driving Under the Influence
EASY	Eliminating Alcohol Sale to Youth Program
ED	Emergency Department
EPA	Environmental Protection Agency
FBI	Federal Bureau of Investigation
FOBT	Fecal Occult Blood Test
FPL	Federal Poverty Level
FY	Fiscal Year
HAFB	Hill Air Force Base
HIV/AIDS	Human Immunodeficiency Virus

12 Acronym List

HP2020	Healthy People 2020
HRSA	U.S. Health Resources and Services Administration Area Resource File
HRQoL	Health-related Quality of Life
HPSA	Health Professional Shortage Area
IBIS	Utah’s Indicator-Based Information System
ICS	Incident Command System
IOM	Institute of Medicine
IP	Immunization Program
LBW	Low Birth Weight
LDS	The Church of Jesus Christ of Latter Day Saints
LHD	Local Health Department
MAPP	Mobilizing for Action through Planning and Partnerships
M.D.	Doctor of Medicine
MDE	Major Depressive Episodes
MHSIP	Mental Health Statistics Improvement Plan
MMR	Measles, Mumps, and Rubella
MMWR	Morbidity and Mortality Weekly Report
MRC	Medical Reserve Corps
MSA	Metropolitan Statistical Area
MVCs	Motor Vehicle Crashes
NAAQS	National Ambient Air Quality Standards
NACCHO	National Association of County and City Health Officials
NCHS	National Center for Health Statistics
NCI	National Cancer Institute
NHTSA	National Highway Traffic Safety Administration
NSCH	National Survey of Children’s Health
NVSS	National Vital Statistics Systems
OHP	Oral Health Program
PANO	Physical Activity, Nutrition, and Obesity
PCE	Perchloroethylene
pCi/L	PicoCurries per Liter
PHAB	Public Health Accreditation Board

12 Acronym List

PM	Particulate Matter
PM2.5	Particulate Matter 2.5 micrometers or less in diameter
PM10	Particulate Matter 10 micrometers or less in diameter
PNAS	Prevention Needs Assessment Survey
PPSM	Persons Per Square Mile
PSA	Prostate-specific Antigen
PTSD	Post-traumatic Stress Disorder
PVC	Pneumococcal Conjugate Vaccine
SHIP	State Health Improvement Plan
SO2	Sulfur Dioxide
STDs	Sexually Transmitted Diseases
STEC	Shiga Toxin-Producing <i>E.coli</i>
SWOT	Strengths, Weaknesses, Opportunities, Threats & Challenges
TB	Tuberculosis
Tdap	Booster of diphtheria, tetanus, and pertussis
TPCP	Tobacco Prevention and Control Program
UDOH	Utah Department of Health
UDPS	Utah Department of Public Safety
UHCR	Utah Hospital Comparison Report
UHSO	Utah Highway Safety Office
UICAA	Utah Indoor Clean Air Act
USGS	United States Geological Survey
USU	Utah State University
UV	Ultraviolet
VBD	Vectorborne/Zoonotic Diseases
VIPP	Violence and Injury Prevention Program
VMT	Vehicle Miles of Travel
VOCs	Volatile Organic Carbon Compounds
VPDs	Vaccine Preventable Diseases
WIC	Women, Infants, and Children
YPLL	Years of Potential Life Lost

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